

REMEDIAL DESIGN INVESTIGATIVE ACTIVITIES SUMMARY REPORT (REVISION 2.0)

Prepared for

U.S. Environmental Protection Agency

Prepared by

TRC

Irvine, California

Representing

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TABLE OF CONTENTS

				PAGE NO
LIS	T OI	TABL	ES	vi
LIS	T O	F FIGU	RES	viii
1.0	INT	RODU	CTION	1-1
	1.1	Subjec	t Property	1-1
	1.2	Summa	ary of Historical and Site Activities	1-2
	1.3	Overvi	ew of Investigative and Superfund Activities	1-3
	1.4	Report	Organization	1-5
2.0	PRO	DJECT	BACKGROUND	2-1
	2.1	Summa	ary of Prior Site Investigations (1971 to 1987)	2-1
		2.1.1	Advanced Foundation Engineering, Inc., 1971	2-1
		2.1.2	Hammond Soils Engineering, 1975	2-1
		2.1.3	Moore & Tabor, 1981	2-2
		2.1.4	Dames & Moore, 1984	2-2
		2.1.5	Dames & Moore, 1985	2-3
		2.1.6	Dames & Moore, 1986 (Toxo Spray Dust, Inc.)	2-4
		2.1.7	Dames & Moore, 1986 (Campbell Property [Area 7])	2-5
		2.1.8	John L. Hunter & Associates, 1987	2-6
	2.2	EPA R	temedial Investigation (1988-1989)	2-7
		2.2.1	Buried Reservoir	2-8
		2.2.2	Area l	2-8
		2.2.3	Area 2	2-9
		2.2.4	Area 3	2-10
		2.2.5	Area 4	2-10
		2.2.6	Area 5	2-11
		2.2.7	Area 6	2-11
		2.2.8	Area 7	2-11
		2.2.9	Area 8	2-12
		2.2.10	Areas Upgradient of Reservoir	2-12
		2.2.11	Ground Water Conditions	2-13
		2 2 12	Subsurface Gas Conditions	2-16



				PAGE NO
		2.2.13	1988-1989 RI Report Conclusion	2-16
	2.3	WDIG	Predesign Activities (1995)	2-17
		2.3.1	Area 4	2-17
		2.3.2	Area 7	2-18
		2.3.3	Soil Gas Measurements	2-19
		2.3.4	Ground Water Analysis	2-20
	2.4	Prior S	Site Investigation Data Evaluation	2-22
3.0	199	7-1998	EPA RD INVESTIGATIVE ACTIVITIES	3-1
	3.1	Soil C	onditions	3-1
		3.1.1	Area 7 Geoprobe Characterization	3-1
	3.2	Reserv	voir Conditions	3-2
		3.2.1	Reservoir Physical Characterization	3-2
		3.2.2	Reservoir Chemical Characterization	3-4
		3.2.3	Piezometer Study	3-5
		3.2.4	High Vacuum Extraction	3-6
	3.3	Soil G	3-7	
		3.3.1	Supplemental Subsurface Gas Investigation	3-8
	3.4	Groun	d Water	3-9
4.0	1997-1999 WDIG RD INVESTIGATIVE ACTIVITIES		4-1	
	4.1	4.1 Soils and Perched Liquids		4-2
		4.1.1	Soils and Perched Liquids Characterization	4-2
		4.1.2	Additional Soil Sampling and Leachability Testing	4-7
			4.1.2.1 Sampling Procedures and Chemical Analysis	4-8
			4.1.2.2 Summary of Analytical Results	4-8
			4.1.2.3 Findings	4-9
	4.2	.2 Reservoir Liquids		4-10
		4.2.1	Initial Reservoir Liquids Investigation	4-10
		4.2.2	Additional Reservoir Liquids Investigations	4-10
			4.2.2.1 TM Nos. 6, 8 and 12 - Reservoir Liquids Testing	4-10
			4.2.2.1.1 Field Activities	4-11
			4.2.2.1.2 Pump Testing at EX-4 and -6	4-14

ii



			•	PAGE NO.
		4.2.2.1.	3 TM Nos. 6 and 8 Findings	4-15
		4.2.2.2 TM No	12 Activities	4-17
		4.2.2.2.	1 TM Nos. 6, 8 and 12 Conclusions	4-18
		4.2.2.3 TM No	13 Activities	4-19
	4.2.3	Phase II Reserve	oir Interior Test Trench Excavation	4-22
		4.2.3.1 Introdu	ction	4-22
		4.2.3.2 Field A	ctivities	4-23
		4.2.3.3 Finding	s	4-25
4.3	Soil G	as		4-27
	4.3.1	Annual Soil Gas	Monitoring Results	4-27
		4.3.1.1 Introdu	ction and Purpose	4-27
		4.3.1.2 Summa	ry of Prior Soil Gas Investigations	4-27
		4.3.1.3 Additio	nal Soil Gas Activities	4-28
		4.3.1.4 Soil Va	por Monitoring Results	4-28
		4.3.1.5 Conclus	sions	4-29
		4.3.1.5.	l Area l	4-29
		4.3.1.5.	2 Area 2	4-29
		4.3.1.5.	3 Areas 3, 4 and 5	4-30
		4.3.1.5.	4 Areas 6 and 7	4-31
		4.3.1.5.	5 Area 8	4-31
		4.3.1.5.	6 Soil Gas Results for the Ten Nested Wells Installed by the EPA in July 1998	4-32
	4.3.2	Annual In-Busin	ness Air Monitoring Results	4-33
		4.3.2.1 In-Busi	ness Air Monitoring Results	4-34
	4.3.3	TM No. 9A - So	il Vapor Extraction Treatability Study	4-34
		4.3.3.1 Introduc	ction	4-34
		4.3.3.2 SVE Te	sting Rationale	4-35
		4.3.3.3 Summa	ry of TM No. 9A Activities	4-35
		4.3.3.4 Summa	ry of TM No. 9A Results	4-37
		4.3.3.4.	1 Zone of Influence Calculation Results	4-37
		4.3.3.4.	2 Air Conductivity Modeling Results	4-38
		4.3.3.4.	3 Soil Gas Recovery and Generation Evaluation	4-39
		4.3.3.4.	4 Summary of SVE Performance	4-41
		4.3.3.4.	5 SVE Gas Recovery Estimates	4-42
		1331	6 SVF Gas Treatment Evaluation	1-12



				PAGE NO
			4.3.3.5 Summary of Findings	4-43
	4.4	Annua	al Ground Water Monitoring	4-44
		4.4.1	Regional and Site Hydrogeologic Conditions	4-44
			4.4.1.1 Regional Hydrogeologic Conditions	4-44
			4.4.1.2 Site Hydrogeologic Conditions	4-45
			4.4.1.3 Site Ground Water Conditions	4-46
		4.4.2	Ground Water Sampling Results	4-47
		4.4.3	Summary	4-48
	4.5	Storm	water	4-49
		4.5.1	Stormwater Monitoring	4-49
		4.5.2	TM No. 11 Activities	4-49
5.0	CO	MPREI	HENSIVE SUMMARY OF SITE CONDITIONS	5-1
	5.1	Summ	ary of Soil and Perched Liquids Conditions	5-1
	5.2	Summ	nary of Soil Gas Conditions	5-3
	5.3	Summ	nary of Ground Water Conditions	5-4
6.0	REF	FEREN	CES	6-1

PAGE NO.

LIST OF TABLES
LIST OF FIGURES

APPENDIX A: TECHNICAL MEMORANDUM NO. 10 - ADDITIONAL SOIL SAMPLING AND LEACHABILITY TESTING DATA (REVISED TEXT INCLUDED)

APPENDIX B: TECHNICAL MEMORANDUM NOS. 6, 8 AND 12 - RESERVOIR LIQUIDS TESTING LABORATORY ANALYTICAL DATA AND CHAINS-OF-CUSTODY (REVISED TEXT INCLUDED)

APPENDIX C: 1998 ANNUAL SOIL GAS MONITORING REPORT DATA

APPENDIX D: 1998 ANNUAL IN-BUSINESS AIR MONITORING REPORT DATA

APPENDIX E: TECHNICAL MEMORANDUM NO. 9A - SOIL VAPOR EXTRACTION TREATABILITY STUDY DATA

APPENDIX F: 1998 ANNUAL GROUND WATER MONITORING REPORT DATA

APPENDIX G: 1998 STORMWATER POLLUTION PREVENTION PLAN DATA

APPENDIX H: RELEVANT TABLES AND FIGURES FOR CHAPTER 2.0, PROJECT BACKGROUND

APPENDIX I: AERIAL PHOTOGRAPHS

APPENDIX J: INDEX TO DISK NO. 1 OF 2

APPENDIX FILE A

INDEX TO DISK NO. 1 OF 2

APPENDIX FILE B

INDEX TO DISK NO. 1 OF 2

APPENDIX FILE C

APPENDIX K: ANALYTICAL RESULTS OF AQUEOUS PHASE AND PRODUCT PHASE

SAMPLING OF VAPOR WELL (VW-09) WASTE DISPOSAL, INC.

SUPERFUND SITE

APPENDIX L: PHASE II - RESERVOIR INTERIOR TEST TRENCH EXCAVATION

REPORT OF FINDINGS WASTE DISPOSAL, INC. SUPERFUND SITE

LIST OF TABLES

TABLE NO.	TITLE
2.1	Review of Historical Aerial Photographs
2.2	Summary of Previous Studies Relevant to the WDI Site
2.3	Major Components of the 1988 and 1989 EPA Remedial Investigation Program
2.4	Physical Characteristics of WDI Subareas
2.5	Site Ground Water Elevations
3.1	Liquid Levels in Reservoir Piezometers
3.2	Soil Gas and Indoor Air Interim Threshold Screening Levels for Constituents of Concern
3.3	Summary of EPA Volatile Organic Interim Threshold Screening Level Exceedances
4.1	Geotechnical Results
4.1A	Summary of Geotechnical Laboratory Data
4.2	TPH Analyses Results
4.2A	Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Direct Push Borings
4.2B	Semi-Volatile Organic Compounds Concentrations in Direct Push Borings
4.2C	Polychlorinated Biphenyls, Pesticides and Metals Concentrations in Direct Push Borings
4.2D	Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Indoor Direct Push Borings
4.2E	Semi-Volatile Organic Compounds Concentrations in Indoor Direct Push Borings
4.2F	Polychlorinated Biphenyls, Pesticides and Metals Concentrations in Indoor Direct Push Borings
4.2G	Summary of Geotechnical Laboratory Data
4.3	Summary of TCLP and STLC Results
4.4	Summary of TM Nos. 6 and 8 Detected Chemical Data for EX-2 Pump Tests
4.5	Additional Microbiological and Chemical Data for EX-2, -4 and -6 Pump Tests
4.6	Summary Liquid Level Field Monitoring Prior to Pump Test



LIST OF TABLES

TABLE NO.	TITLE
4.7	Hydraulic Yield for Pump Tests at EX-2, -4 and -6
4.8	Summary of Chemistry Data for TM Nos. 6 and 8 Pump Test for EX-2 Activities
4.8A	Summary of Chemistry Data for TM No. 6 Pump Test Activities for EX-4 and -6
4.9	Summary of TM No. 6 Detected Chemical Data EX-4 and -6 Prepump Test
4.10	Liquid Levels in EPA Piezometers TM No. 12 Activities
4.10A	Summary of TM No. 13 Detected Analytical Results Extraction Wells
4.11	Reservoir Liquid Levels Near Phase II Test Trench Locations
4.12	Paint Filter Test Results
4.13	Vapor Well Analytical Data for February 1998
4.14	Vapor Well Analytical Data for April 1998
4.15	Vapor Well Analytical Data for July 1998
4.16	Vapor Well Analytical Data for October 1998
4.16A	Summary of Trend Data for Selected Soil Gas Wells for Acetone, Benzene, Ethylbenzene, m-& p-Xylenes, Methane, PCE, TCE, Toluene and Vinyl Chloride
4.17	Chemicals of Concern Which Exceeded Soil Gas Interim Threshold Limits 1998 Vapor Well Monitoring
4.17A	Chemicals of Concern Which Exceed Soil Gas Interim Threshold Limits 1999 Vapor Well Monitoring
4.18	Chemicals of Concern Which Exceeded Site Boundary Interim Threshold Limits 1998 Vapor Well Monitoring
4.18A	Chemicals of Concern Which Exceeded Site Boundary Interim Threshold Limits 1999 Vapor Well Monitoring
4.18B	Critical Wells in Area 1 Which Exceed Interim Threshold Limits Vapor Well Monitoring
4.18C	Critical Wells in Area 2 Which Exceed Interim Threshold Limits Vapor Well Monitoring
4.18D	Critical Wells in Areas 4, 5 and 7 Which Exceed Interim Threshold Limits Vapor Well Monitoring



LIST OF TABLES

TABLE NO.	TITLE
4.18E	Critical Wells in Area 8 Which Exceed Interim Threshold Limits Vapor Well Monitoring
4.19	1998 In-Business Air Monitoring Frequency
4.19A	1999 In-Business Air Monitoring Frequency
4.20	Chemical Inventory of Onsite Businesses
4.21	1998 Interim Threshold Screening Level Exceedances During In-Business Air Monitoring
4.21A	1999 Interim Threshold Screening Level Exceedances During In-Business Air Monitoring
4.21B	Summary of Trend Data for Selected In-Business Air Sample Locations for Acetone, Benzene, Ethylbenzene, m- & p-Xylenes, Methane, PCE, TCE, Toluene, and Vinyl Chloride
4.22	Summary of Zone of Influence by Site Area
4.23	Summary of GASSOLVE Modeling Results
4.24	Comparison of Soil Type from Boring Logs and Soil Type Determined from Horizontal Permeability
4.25	Comparison of Soil Gas Levels
4.26	Estimate of Mass Removal of Methane, Benzene and Vinyl Chloride During SVE Testing
4.27	1998 Existing Ground Water Monitoring Wells
4.27A	1999 Existing Ground Water Monitoring Wells
4.28	Water Level Measurements and Ground Water Elevations from 1988 Through 1999
4.29	Ground Water Analyses and Quality Control Objectives
4.30	Summary of Trend Data for Selected Ground Water Wells for TCE, PCE, Benzene and Toluene
5.1	Summary of Findings for Site Investigations from 1971 to 1998 for Soil Media
5.2	Summary of Findings for Site Investigations from 1971 to 1998 for Soil Gas and In-Business Air Media
5.3	Summary of Findings for Site Investigations from 1971 to 1998 for Ground Water Media
5.4	Summary of Findings for Site Investigations from 1971 to 1998 for Reservoir and Perched Liquids Media



LIST OF FIGURES

FIGURE NO.	TITLE
1.1	CERCLA (Superfund) Process Timeline at WDI Site
1.2	Site Location Map
1.3	Site Features
2.1	Boring Location Map
2.2	Surface Soil Sampling
2.3	Site Map Showing Well Locations and Water Levels
2.4	Boring Location Map Campbell Property
2.5	CPT Soundings Campbell
2.6	Surface Soil Sampling Campbell Property
2.7	Soil Boring Locations
2.8	1989 Arsenic Concentrations That Exceeded PRGs
2.9	1989 Beryllium, Lead and Zinc Concentrations That Exceeded PRGs
2.10	1989 VOC and PCB Concentrations That Exceeded PRGs
2.11	Ground Water Monitoring Well Locations
2.12	Ground Water Elevation Map November 1988
2.13	Ground Water Elevation Map January 19, 1989
2.14	Subsurface Gas Monitoring Well Locations
2.15	Concentrations of Chloroform, Trichloroethane (TCA), Dichloroethane (DCA), Trichloroethene (TCE) and Tetrachloroethene (PCE) in Subsurface Gas Samples Collected in March 1989
2.16	Concentrations of Benzene, Trichloroethene (TCE) and Tetrachloroethene (PCE) in Subsurface Gas Samples Collected in March 1989
2.17	Percent Methane Present in Subsurface Gas Samples Collected in March 1989
2.18	Sump Materials Identified for Excavation in 1993 ROD
2.19	1989 and 1995 Soil Boring Analytical Data Area 4
2.20	1989 and 1995 Soil Boring Analytical Data Area 7
2.21	Vapor Well Locations and Monitoring Results
2.22	Ground Water Contours, Sampling Well Locations and VOC Analyses Results



LIST OF FIGURES (Continued)

FIGURE NO.	TITLE
3.1	Site Location Map
3.2	Extent of Product and Staining Area 7 December 1998
3.3	Dipole-Dipole Resistivity Pseudo-Section
3.4	EPA Piezometer Locations Within Reservoir Boundary
3.5	Reservoir Cross Section Showing PVC Piezometer Construction January 1999
3.6	ERTC/REAC Actual Excavation Locations December 1998
3.7	Extraction Well and Monitoring Probe Locations
3.8	Existing Vapor Well Network
3.9	Ground Water Monitoring Well Locations
4.1	WDIG Geoprobe Soil Data Summary
4.1A	Locations of SSI Borings
4.2	Locations of Geoprobe Liquids Samples and Analyses Results
4.2A	Revised Limits of Buried Waste
4.3	TM No. 10 Soil Sample Locations
4.4	VW-09 Location and Analysis Results
4.5	Reservoir Liquids Test Locations
4.6	Cross Section A-A' at EX-2 Pump Test Location
4.7	Cross Section B-B' at EX-2 Pump Test Location
4.8	0.5 gpm Test Data
4.9	0.25 gpm Test Data and Cycle Test Data
4.10	Cross Section A-A' with Liquid Levels at EX-2 Pump Test Location
4.11	Cross Section B-B' with Liquid Levels at EX-2 Pump Test Location
4.12	Reservoir Well and Probe Liquid Levels During "El Niño"
4.13	Cross Section C-C' with Liquid Levels at EX-4 Pump Test Location
4.14	Cross Section D-D' with Liquid Levels at EX-4 Pump Test Location
4.15	Cross Section E-E' with Liquid Levels at EX-6 Pump Test Location
4.16	Cross Section F-F' with Liquid Levels at EX-6 Pump Test Location



LIST OF FIGURES (Continued)

FIGURE NO.	TTILE
4.17	EX-4 Pump Test Data
4.18	EX-6 Pump Test Data
4.19	Liquid Levels Versus Diameter of Well
4.19A	Extraction Well Locations
4.19B	Reservoir Liquids Extraction Per Week During System Operation
4.19C	Total Volume of Liquids Extracted Per Week as of June 2, 2000
4.19D	Liquid Recovery Levels Per Well
4.20	Test Trench and Piezometer Locations
4.21	Test Trench II-1 Cross Section and Piezometer Construction Details
4.22	Test Trench II-2 Cross Section and Piezometer Construction Details
4.23	Test Trench II-3 Cross Section
4.24	Summary of 1998 Vapor Well Monitoring Results Area 1
4.25	Summary of 1998 Vapor Well Monitoring Results Area 2
4.26	Summary of 1998 Vapor Well Monitoring Results Areas 3, 4 and 5
4.27	Summary of 1998 Vapor Well Monitoring Results Areas 6 and 7
4.28	Summary of 1998 Vapor Well Monitoring Results Area 8
4.28A	Summary of 1999 Vapor Well Monitoring Results Area 1
4.28B	Summary of 1999 Vapor Well Monitoring Results Area 2
4.28C	Summary of 1999 Vapor Well Monitoring Results Area 3, 4 and 5
4.28D	Summary of 1999 Vapor Well Monitoring Results Areas 6 and 7
4.28E	Summary of 1999 Vapor Well Monitoring Results Area 8
4.29	1998 In-Business Air Monitoring Locations and Analytical Results
4.29A	1998 - 1999 In Business Air Monitoring Locations and Analytical Results
4.30	SVE Test Areas
4.31	SVE Test and Recovery Phase Methane Concentrations
4.32	SVE Test and Recovery Phase Benzene Concentrations
4.33	SVE Test and Recovery Phase Vinyl Chloride Concentrations
4.34	Ground Water Site Contour Map June 1998



LIST OF FIGURES (Continued)

FIGURE NO.	<u>TITLE</u>
4.34A	Ground Water Elevation Contour Map 1999
4.35	1988 - 1998 Ground Water Monitoring Well Locations and SVOC Analyses Results
4.35A	1999 Ground Water Monitoring Well Locations and SVOC Analyses Results
4.36	1988 - 1998 Ground Water Monitoring Well Locations and Metals Analyses Results
4.36A	1999 Ground Water Monitoring Well Locations and Metals Analyses Results
4.37	1988 - 1998 Ground Water Monitoring Well Locations and VOC Analyses Results
4.37A	1999 Ground Water Monitoring Well Locations and VOC Analyses Results
4.38	1988 - 1992 Ground Water Monitoring Well Locations and PCB/Pesticides Analyses Results
4.39	1998 Site Plan and Stormwater Monitoring Points
5.1	Site Media Conditions
5.2	Revised Limits of Waste
5.3	Cross Section A-A'
5.4	Perched Liquids Zones
5.5	Location of Vapor Wells
5.6	Exceedances of Methane (1.25%) Benzene (100 ppb) and Vinyl Chloride (25 ppb) Criteria Vapor Well Network
5.7	Exceedances of Methane (1.25%), Benzene (100 ppb) and Vinyl Chloride (25 ppb) Criteria - Shallow Wells
5.8	Exceedances of Methane (1.25%), Benzene (100 ppb) and Vinyl Chloride (25 ppb) Criteria - Intermediate Wells
5.9	Exceedances of Methane (1.25%), Benzene (100 ppb) and Vinyl Chloride (25 ppb) Criteria - Deep Wells



1.0 INTRODUCTION

- 1. This Remedial Design (RD) Investigative Activities Summary Report (Report) is a compilation of field data collected from 1971 through 2000 at the Waste Disposal, Inc. (WDI) Superfund site, located in Santa Fe Springs, California (hereafter referred to as "the Site"). The Waste Disposal, Inc. Group (WDIG), which consists of 21 Potentially Responsible Parties (PRPs) (listed in Section 1.3), is submitting this Report in compliance with the Amended Statement of Work (SOW) of the Amended Administrative Order, Docket No. 97-09 issued by the United States Environmental Protection Agency (EPA) on March 31, 1997 (EPA, 1997a). The purpose of this Report is to summarize data collected during field investigations completed during 1997 and 2000, to evaluate and analyze these data in comparison with previously collected historical data (1971 to 1995) and based upon this summary and comparison, present the current site conditions for the purposes of completing the remedial design. Revision 1.0 of this report was submitted in August 1999. Revision 2.0 incorporates comments received from EPA on March 27, 2001, as well as data generated in 1999 and 2000.
- 2. The objective of this Report is to provide a compilation of the relevant site investigation data. This data is to be used in preparing the Feasibility Study (FS), and to support the revised Record of Decision (ROD), which the EPA will be preparing.
- 3. This Report represents one of the major milestones of the WDI Superfund process. The projected remaining Superfund activities for the Site include:
 - Feasibility Study.
 - Development and Issuance of a Proposal Plan.
 - Development and Issuance of a Revised ROD.
 - Negotiation of a Consent Decree.
 - Remedial Action.

Figure 1.1 presents how the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (Superfund) process has progressed at the Site over time and indicates the remaining steps toward completion.

1.1 SUBJECT PROPERTY

1. The Site is located in Santa Fe Springs, Los Angeles County, California on an approximate 38-acre parcel of land (see Figures 1.2 and 1.3). The Site is currently bordered on the northwest by Santa Fe Springs Road, on the northeast by a Fedco distribution center and



Rev. 2.0, 5/4/01 1-1

- St. Paul High School, on the southwest by Los Nietos Road, and on the southeast by Greenleaf Avenue.
- 2. The Site is currently comprised of 22 parcels on which various businesses, such as machine shops, auto repair shops, small commercial businesses and light industrial complexes have been developed. Areas 1 and 8 of the Site, parallel to Los Nietos Road and Santa Fe Springs Road, are occupied by several light industrial complexes and small commercial businesses. The property along Greenleaf Avenue, has one existing structure (located in Area 5) used for commercial business. Areas 6 and 7 contain several concrete foundations which remain from previous structures. The Site contains a buried 42-million-gallon-capacity reservoir originally constructed above grade for petroleum storage located in Area 2. The northwestern portion of the reservoir area is covered with an asphalt parking lot, used for recreational vehicle (RV) storage. The remainder of the reservoir area (Area 2), Areas 3 and 4 are undeveloped.

1.2 SUMMARY OF HISTORICAL AND SITE ACTIVITIES

- 1. The reservoir was decommissioned for storage in the late 1920s or early 1930s and beginning in the late 1940s to early 1950s was used for disposal of a range of wastes and solid fill materials. Aerial photographs from 1945, 1949, 1953 and 1958 show the reservoir as having liquids (rainwater or oily liquid/sludge) and/or drilling muds extending to the base of the inner toe of the berm. After 1949, activities were regulated under permit from Los Angeles County until completion of the disposal facility closure in 1964. Reliable documentation on disposal was not maintained; as a result, a comprehensive history of site disposal practices or accepted waste is not available. However, permitted wastes included the following: rotary drilling muds; clean earth; rock, sand and gravel; paving fragments; concrete; brick; plaster; steel mill slag; dry mud cake from oil field sumps and acetylene sludge. Investigations have shown that disposed materials also included, but are not limited to, organic wastes, oil refinery wastes, solvents and waste chemicals. Wastes were disposed of within the reservoir, and in bermed areas surrounding the reservoir and throughout the Site.
- 2. In 1953, the Site began receiving fill material for covering the Site, including the reservoir area and unlined bermed disposal pits. Borehole data indicates that between 1 to 15 feet of fill material exists over all or most of the Site. The fill consists mostly of a silty sand to silty clay material containing construction debris (e.g., concrete, asphalt, wood and brick) with low concentrations (i.e., below background levels) of various chemicals of concern (COC), such as beryllium and arsenic.

- 3. Aerial photographs from 1922 to 1998 of the Site were reviewed and observations from them are presented in Chapter 2.0 of this Report. The following generally summarizes site conditions observed in the photographs:
 - 1922 to 1923: Site is undeveloped.
 - 1924 to 1949: Reservoir exists and storage/disposal activities are observed.
 - 1953 to 1963: Reservoir is covered with fill material. Remaining portion of the Site is being developed.
 - 1963 to 1998: Site is developed and possibly used for light industrial purposes, i.e., similar to present conditions.

1.3 OVERVIEW OF INVESTIGATIVE AND SUPERFUND ACTIVITIES

- 1. The Site currently consists of 22 individual parcels of land, which have been the subject of various investigative activities from the early 1970s through 2000. These activities have included the investigation of the physical and chemical characteristics of the soil, ground water, soil gas, liquids and in-business air at the Site.
- 2. During the period from 1971 through 1987, the following relevant activities were completed at the Site for geotechnical and environmental assessment purposes:
 - 1971 Preliminary Foundation Investigation (Advanced Foundation Engineering, Inc.).
 - 1975 Fill Investigation and Preliminary Soils Study (Hammond Soils Engineering).
 - 1981 Foundation Investigation (Moore and Tabor).
 - 1984 Phase I, (Dames & Moore).
 - 1985 Phase II, (Dames & Moore).
 - 1986 Site Investigation (Toxo Spray Dust, Inc.), (Dames & Moore).
 - 1986 Site Investigation (Campbell Property), (Dames & Moore).
 - 1987 Soils Investigation (Hunter and Associates).
- 3. Results of these investigations indicated the following conditions:
 - Oil contaminated soils were observed in the reservoir area and in other areas surrounding it.
 - Analysis of soil samples indicated the presence of elevated metal and semivolatile organic compounds (SVOC) concentrations.
 - Pesticide contamination was observed in the area surrounding the Toxo Spray Dust, Inc. site located at 12651 East Los Nietos Road.
 - Soil gas was detected in areas of prior waste handling.

Relevant figures and tables from these reports are included in Appendix H.

4. The Site was placed on the National Priorities List (NPL) in July of 1987. In 1988, EPA undertook a removal action, erecting a fence around the southeast corner of the Site to improve security and prevent accidental exposure to possible surface contamination.

During 1988 to 1993, EPA performed a Remedial Investigation/Feasibility Study (RI/FS) (EPA, 1993c) process which led to the selected remedy for the buried waste presented in the original ROD (EPA, 1993d).

- 5. The WDIG, initially comprised of the eight companies⁽¹⁾ named in the original Administrative Order, Docket No. 94-17, dated December 23, 1993, undertook Predesign and Design activities during 1995 and 1996, and submitted a Predesign/Intermediate (60%) Design Report (TRC, 1995) and a Prefinal (90%) Design Report (TRC, 1996a) to EPA. The 1995 Predesign Activities conducted by WDIG focused primarily on soil conditions in Areas 4 and 7.
- 6. In 1997, EPA named 21 companies⁽²⁾ in the Amended Administrative Order, Docket 97-09 (EPA, 1997a). The expanded WDIG has undertaken additional RD Investigative Activities, which are presented in this Report, plus other activities requested by EPA in the Amended SOW (EPA, 1997b).
- 7. Recent investigations (i.e., 1997 to 2000) were conducted by WDIG and EPA to collect and review additional data on ground water, soil, soil gas and liquids (perched and reservoir). These investigations include the following:
 - EPA Activities (1997 through 1998):
 - Subsurface Gas Contingency Plan which included the following:
 - Soil Gas Survey.
 - In-Business Air Monitoring.
 - Area 7 Geoprobe Investigation.
 - Reservoir Physical and Chemical Characterization.
 - Piezometer Study of the Reservoir Interior.
 - High Vacuum Extraction Study.
 - Ground Water Data Review and Recommendations.
 - WDIG Activities (1997 through 1998):
 - 1997 Geoprobe Investigation.
 - Technical Memorandum (TM) No. 6 Reservoir Liquids Recovery Test (Revision 1.0).
 - TM No. 7 Vapor Well Construction.
 - TM No. 8 Additional Reservoir Liquids Extraction Well and Vapor Well/Probe Sampling.
 - TM No. 9A Soil Vapor Extraction Testing.
 - TM No. 10 Additional Soil Sampling and Leachability Testing (Revision 2.0).
 - TM No. 11 Reservoir Area Grading and Waste/Debris Management.

(1) Santa Fe Energy Resources, Inc.; Mobil Oil Corporation; Dia-Log Company; Chevron U.S.A., Inc.; Dresser Industries, Inc.; FMC Corporation; Texaco Inc.; Union Oil Company.

Rev. 2.0, 5/4/01 1-4



Archer Daniels Midland; ARCO; Atlantic Oil Company; Bethlehem Steel; Chevron Corporation; Conoco, Inc.; Conopco; Dilo, Inc.; Dresser Industries, Inc.; Exxon; Ferro Corporation; FMC Corporation; Hathaway; Monterey Resources; McDonnell Douglas; Mobil Oil Corporation; Santa Fe International Corporation; Shell; Texaco, Inc.; Union Pacific Railroad; UNOCAL.

- TM No. 12 Additional Reservoir Liquids Recovery Testing and Piezometer Abandonment.
- Phase II Reservoir Interior Test Trench Excavations.
- Quarterly ground water, soil gas and in-business air monitoring.
- WDIG Activities (1999 to 2001):
 - TM No. 13 Pilot Scale Treatability Study for Reservoir Liquids Removal (Revision 1.0).
 - Supplemental Subsurface Investigation.
 - Installation of ground water monitoring wells W-32 and GW-33.
 - Quarterly ground water, soil gas and in-business air monitoring.

A complete description of the objectives and findings of these investigations is provided in Chapters 3.0 and 4.0 in this Report. At the request of EPA, data collected by the EPA during the 1988-1989 RI and 1997-1998 RD Investigative Activities, has been included and summarized in this Report.

- Results of the RD Investigative Activities performed during 1997 and 1998 have been compiled based on potential COC provided in the 1993 ROD and the 1997 Subsurface Gas Contingency Plan. The data was evaluated using potential Interim Threshold Standard Levels (ITSLs) presented in the Subsurface Gas Contingency Plan, Region 9 Preliminary Remediation Goals (PRGs), as well as other relevant State and Federal Environmental Standards. EPA may revise these COC and establish new cleanup standards as the Superfund process continues.
- 9. EPA has requested that WDIG incorporate data from previous EPA field activities (e.g., RI and EPA RD Investigative Activities) into this Report. In doing so, the WDIG neither acknowledges the validity of such data nor does it waive its rights to review and/or contest EPA's past cost summary documentation.

1.4 REPORT ORGANIZATION

- The remainder of this Report is organized in the following chapters:
 - Chapter 2.0: Project Background
 - Chapter 3.0: 1997-1998 EPA RD Investigative Activities
 - Chapter 4.0: 1997-2001 WDIG RD Investigative Activities
 - Chapter 5.0: Comprehensive Summary of Site Conditions Chapter 6.0: References

 - Appendices A through L

As mentioned above, this Report is a compilation of historical site data from 1971 through 2001. Chapter 6.0 provides a complete list of the references used to generate this Report.



2.0 PROJECT BACKGROUND

- 1. This chapter provides a summary of historical site investigations that have been performed from 1971 through 1995 for various investigative purposes as described in Chapter 1.0. In addition, a review of historical aerial photographs has been performed and is summarized in Table 2.1. Copies of the aerial photographs are provided in Appendix I.
- 2. Additional RD Investigative Activities, as specified in the Amended SOW (EPA, 1997b), have been conducted at the Site by EPA and WDIG from 1997 to 2001 and are further discussed in Chapters 3.0 and 4.0.

2.1 SUMMARY OF PRIOR SITE INVESTIGATIONS (1971 TO 1987)

 Several investigative activities have been performed at the Site from 1971 to 1987 as mentioned in Section 1.3. The following sections, including Table 2.2, summarize the SOW and findings for each of these investigations. Note that this information has previously been submitted and was taken from the 1989 EPA RI report.

2.1.1 ADVANCED FOUNDATION ENGINEERING, INC., 1971

1. In 1971, Advanced Foundation Engineering, Inc. (AFE) conducted a Preliminary Foundation Investigation for a proposed industrial building to be located at 12707 East Los Nietos Road, southwest of the reservoir near Los Nietos Road. Results of the geotechnical investigation found this area to be underlain by fill material (0 to 3 feet), clayey silt and silty clay (3 to 15 feet) and sandy soil (15 to 20 feet). Evidence of contamination was not observed during the investigation.

2.1.2 HAMMOND SOILS ENGINEERING, 1975

- In 1975, Hammond Soils Engineering (HSE) conducted a Fill Investigation and Preliminary Soils Study of the same parcel (12707 East Los Nietos Road) for Coastal Developers Company. The scope of work included a total of four backhoe test pits in the proposed building area to depths ranging from 7 to 11 feet.
- 2. According to this field investigation, fill material was located over approximately two-thirds of the Site. The fill was described as mottled sandy silt and clay with some deleterious material



and oil contaminated soil (HSE, 1975) and was found to a depth of approximately 7.5 feet at the extreme north of the area, 8.5 feet in the center and 15 feet in the south. HSE determined that the fill was underlain by firm to hard, moist, reddish brown, clayey silt or silty clay to a depth of 10 feet.

2.1.3 MOORE & TABOR, 1981

1. Moore & Tabor conducted a Foundation Investigation in 1981 for a proposed commercial/industrial park to be located on approximately 4.8 acres of land at the northeast corner of Greenleaf Avenue and Los Nietos Road for Castille Builders, Ltd. Results of this investigation indicate that loose fill, approximately 1 to 5 feet deep, covers the majority of this site. This fill is described as silty sand and clayey silt with intermixed trash and debris. Alluvial deposits underlying the fill are described as interbedded, moderately dense to dense, fine to medium silty sand, and soft to very soft clayey and sandy silt. These deposits were observed at depths extending to 16 feet.

2.1.4 DAMES & MOORE, 1984

- 1. Dames & Moore completed four borings as part of a Phase I Remedial Investigation of the subsurface conditions at the Site in September 1984. This investigation was conducted for the Redevelopment Agency of the City of Santa Fe Springs. The purpose of this investigation was to provide a generalized vertical profile of the chemical characteristics of the reservoir and areas outside the reservoir. One boring was drilled in the center of the concrete reservoir and was terminated at a depth of 22.5 feet. The remaining three borings were drilled around the outside perimeter of the reservoir boundary and were terminated at depths which ranged from 18.5 to 23.5 feet. Refer to Figure 2.1 for the locations of the borings.
- 2. Soil samples were collected every 2.5 feet for logging purposes and chemical analysis. Concentrations of organic vapors were measured using a portable HNu photoionization detector (PID) to determine which samples should undergo laboratory analysis. Selected samples were analyzed for California Assessment Manual (CAM) metals and EPA priority pollutant organics (Methods 8240 and 8270).
- 3. Boring logs indicate that approximately 4 to 9 feet of fill material was encountered. Native soil, composed of clay with silt and sand, was observed at a depth of 23.5 feet in the borings outside the reservoir.

4. Analytical results provided in the Summary of Findings Report (Dames & Moore, 1984) indicate that one of the soil borings, DMEB-1, contained levels of barium (310 parts per million [ppm]), cadmium (2.6 ppm), copper (57 ppm), lead (250 ppm), nickel (38 ppm), vanadium (45 ppm) and zinc (2,300 ppm). DMEB-2 (composite) contained concentrations of barium (930 ppm), cadmium (1.9 ppm), copper (28 ppm), lead (280 ppm), and nickel (27 ppm). DMEB-2 had similar concentrations as DMEB-1 including mercury (0.22 ppm) and thallium (50 ppm). However, vanadium and zinc were not detected. DMEB-3 contained only concentrations of cadmium (1.6 ppm) and vanadium (32 ppm). DMEB-4 (5-foot sample) contained concentrations of barium (320 ppm), cadmium (1.9 ppm), copper (34 ppm), lead (17 ppm), nickel (23 ppm) and vanadium (32 ppm). The concentrations reported for these samples could possibly exceed Soluble Threshold Limit Concentration (STLC) limits.

2.1.5 DAMES & MOORE, 1985

- 1. Based on the results from the 1984 Phase I activities, the City of Santa Fe Springs Redevelopment Agency requested that Dames & Moore conduct a Phase II RI at the Site and adjacent athletic field. This investigation, which was conducted in March 1985, included the collection of 35 shallow soil samples from the Site, the St. Paul High School athletic field, and a vacant lot approximately 1,050 to 1,300 feet to the northwest of the Site (see Figure 2.2). The purpose of the investigation was to evaluate soil conditions and ground water quality in the upper most saturated zone both upgradient and downgradient of the site (see Figure 2.3 for location of ground water monitoring wells).
- 2. Subsurface soil samples consisted of loose silty sand, fine gravel with occasional asphalt, wood fragments, concrete and plant matter. Analytical results indicated that five surface samples (ranging from 0- to 1 foot in depth) contained lead concentrations which exceed the STLC. However, the lead concentrations were similar to background concentrations, as indicated by the samples analyzed from the vacant lot.
- 3. Barium, copper and vanadium were present in concentrations below the STLC in samples from the Site, but were not found in background samples. Neither of the two surface samples analyzed using Methods 624 and 625 contained detectable concentrations of EPA priority pollutants.

- 4. The boring log for ground water monitoring well (MW) MW-1, showed 1 foot of silty sand, gravel and concrete fragments, underlain by 2 feet of silty clay with traces of fine sand, underlain by a 1-foot thick concrete layer. Beneath the concrete layer, black oily sludge occurred to a depth of 14 feet, underlain by 8 feet of sand, traces of clay and some silt, then very fine to medium sand to a depth of 40 feet. Sand, clayey silt and combinations thereof occurred between 40 and 48 feet. This was underlain by sand to a depth of 52.5 feet (water table depth), sand with some silt to 65 feet, and fine to medium sand to 75 feet (Dames & Moore, 1985).
- 5. Ground water monitoring well MW-2 was originally drilled into one of the sumps that surround the WDI reservoir. The well was abandoned at a depth of 15 feet when it was determined that although there was silty sand with some gravel to a depth of 5 feet, this material was underlain almost exclusively by waste material and free liquid. The location was moved to the west. The boring log for MW-2 shows silty clay with some sand to 25 feet, underlain by sand and fine gravel to termination of the boring at 77 feet. An interbedded layer of silty clay matrix was found between 33 and 38 feet, and interbedded fine sandy silt and clayey silt occurred between 49 and 52 feet. Water was encountered in MW-2 at 50.5 feet (Dames & Moore, 1985).
- 6. The boring log for monitoring well MW-3 shows sandy silt, with some clay, brick, concrete and glass fragments to a depth of 9 feet. This is underlain by clayey silt and silty clay (natural soil) to a depth of 23 feet, and by sand to 74 feet, at which point the boring was terminated. An interbedded silty clay and clayey silt matrix was found between 33 and 38 feet. Water was encountered at 50.5 feet (Dames & Moore, 1985).
- 7. Collected water samples did not contain detectable concentrations of either CAM metals or EPA priority pollutants. Monitoring well MW-3 did, however, contain 12 parts per billion (ppb) of chlordane which exceeds the California Department of Health Services (DHS) action level for chlordane in drinking water (0.55 ppb). It should be noted that MW-3 was installed adjacent to the Toxo Spray Dust, Inc. site, a pesticide manufacturing and storage facility.

2.1.6 DAMES & MOORE, 1986 (TOXO SPRAY DUST, INC.)

1. As part of site investigation activities for the City of Santa Fe Springs Redevelopment Agency, Dames & Moore (1986d) collected two samples from the flooring in the former dry-mix area of the Toxo production building located at 12651 East Los Nietos Road on July 1, 1986.

Toxo Spray Dust Inc. operated as a pesticide manufacturing and storage facility adjacent to the reservoir in 1953. On July 9, 1986, six shallow soil vapor probes were installed. Results of this work showed elevated concentrations of pesticide compounds, methane and nonmethane gases which resulted in the DHS requiring that the Toxo Spray Dust, Inc. building be demolished and hauled to a Class I landfill for disposal.

- 2. In September 1986, the Toxo operations building was demolished. Following the demolition, Dames & Moore collected two soil samples 10 inches below the former building location.
- 3. The results of the work performed in July and September 1986 showed the following:
 - Floor samples contained methylparathion, ethylparathion and endosulfan II.
 - The sample from vapor probe (VP) VP-1 contained 231,000 ppmv (23.1 percent by volume in air) of methane and 597 ppmv of total nonmethane hydrocarbon as hexane.
 - Soil samples contained malathion, ethylparathion and endosulfan I. Soils also contained concentrations of aldrin, 4,4', DDE and 4,4'-DDT which exceeded the State of California Total Threshold Limit Concentration (TTLC) limits for hazardous waste.

2.1.7 DAMES & MOORE, 1986 (CAMPBELL PROPERTY [AREA 7])

- During May 1986, the City of Santa Fe Springs Redevelopment Agency requested Dames & Moore to conduct an RI to locate and estimate the volume of waste material on the Campbell property (Area 7). This field investigation included the installation of four vapor probes to depths of 5 feet (see Figure 2.4). Total organic vapor concentrations within the soil gas were measured by extracting gas from the soil through the probe with a vacuum pump and analyzing it with an organic vapor analyzer (OVA) and a natural gas indicator (NGI). Six soil borings were also drilled on the Campbell property (see Figure 2.4). Four of these borings (DM-1, 2, 3 and 4) were drilled in areas where drilling muds were previously encountered (i.e., 1981 and 1985 field investigations by EJN & Associates and Moore & Tabor) in the shallow subsurface. Borings DM-4, DM-5 and DM-6 were drilled adjacent to the Site in order to evaluate whether hazardous chemical compounds have migrated across the property boundary.
- 2. Naphthalene (200 ppb), di-n-butyl phthalate (2,300 ppb) and 2-methylnaphthalene (140 ppb) were found in DM-1 at a depth of 6.0 feet. Boring DM-2 contained concentrations of naphthalene (21,000 ppb), fluorene (35,000 ppb), phenanthrene (48,000 ppb),

Rev. 2.0, 5/4/01 2-5

2-methyl-naphthalene (430,000 ppb) and ethylbenzene (7,500 ppb) at a depth of 8.5 feet. At a depth of 11 feet, boring DM-2 contained concentrations of naphthalene (16,000 ppb), di-n-butyl phthalate (1,300 ppb), fluorene (5,200 ppb), phenanthrene (6,700 ppb), isophorone (4,700 ppb), chrysene (2,200 ppb) and 2-methylnaphthalene (48,000 ppb). Boring DM-3 contained concentrations of naphthalene (40,000 ppb), fluorene (12,000 ppb), phenanthrene (15,000 ppb) and 2-methyl-naphthalene (78,000 ppb) at a depth of 16 feet. Detectable concentrations of di-n-butyl phthalate (390 ppb) were found at a depth of 3.5 feet in Boring DM-4. Soil pH was found to be between 7.9 and 8.4. All metal concentrations were reported to be below the TTLC and all but three metal concentrations were reported below the STLC, but the exact values of these concentrations were not reported.

- 3. In June 1986, Dames & Moore installed three shallow (5- to 6-feet) soil vapor probes and performed 21 cone penetrometer test (CPT) soundings at the Campbell property. The purpose of this work was to: (1) better estimate the extent of sumps and associated soft material at the site, and (2) utilize shallow vapor probes to assess the nature and concentration of organic vapors in the soils beneath the site.
- 4. The CPT soundings show the presence of very soft sump materials possibly including desiccated muds and loose fill. Two approximations for the horizontal extent of the soft material are shown in Figure 2.5. The inner zone, containing very soft material, has approximate dimensions of 100 feet by 175 feet with an average thickness of 10 feet. Very soft material was encountered as deep as 18 feet. Including the overburden, the inner zone volume would be 10,000 to 12,000 cubic yards, assuming that the outer zone represents the margin of the sump. With generally shallower depths of sump material, the additional volume was estimated to be about 2,000 to 4,000 cubic yards (Dames & Moore, 1986a).
- 5. Analysis of gas samples indicates 9,500 ppm of methane at a depth of 6 feet was in VP-1, no detectable concentration of gas was in VP-2, and 11,200 ppm of methane and 29 ppm of total nonmethane hydrocarbon as hexane at a depth of 6 feet were in VP-3 (Dames & Moore, 1986a).

2.1.8 JOHN L. HUNTER & ASSOCIATES, 1987

1. On December 8, 1987, four soil samples were collected from the Campbell property (Area 7) by John L. Hunter & Associates, Inc. following the unauthorized discharge of plating solutions to the ground (see Figure 2.6).



2. Results for the samples indicated that metal concentrations were below the TTLC (Hunter, 1988), except for Sample 1 which exceeded the TTLC for nickel. The STLC was exceeded for: chromium and nickel (Samples 1, 2, 4); copper, zinc and arsenic (Sample 1); and cadmium and lead (all samples). A waste extraction test (WET) analysis was not performed. Concentrations of nitrate varied from 9 to 3,990 ppm although Sample 2 contained no detectable concentration of nitrate. Soil pH varied from 5.6 to 7.9.

2.2 EPA REMEDIAL INVESTIGATION (1988-1989)

- The location and configuration (size and composition of parcels), history and results of
 previous investigations at the Site prompted the EPA to conduct an extensive field
 investigation. EBASCO was tasked by the EPA to perform an RI after the site was listed on
 the NPL. Major components of the field investigation were conducted during 1988 and 1989
 and are summarized in Table 2.3.
- Boundary, topographic and location surveys were conducted prior to initiating field sampling
 activities. During these surveys, boring and well locations were established, a datum point for
 subsurface investigations was established, site drainage patterns were identified, and geologic
 anomalies were noted.
- 3. Several geophysical surveys, including electromagnetic conductivity (EM), CPT and ground-penetrating radar (GPR), were also conducted prior to field sampling activities in order to locate the concrete-lined reservoir, find drilling obstructions and characterize the WDI waste handling and deposition areas. These areas had previously been identified from aerial photos. Final interpretations of the data produced during these tests yielded estimates of depth, relative soil densities and strengths, and a preliminary estimate of the horizontal extent of WDI waste handling areas.
- 4. To evaluate the extent of subsurface soil contamination, 108 soil borings were drilled to a depth of 35 feet at specified locations around the site (see Figure 2.7). Figures 2.8 to 2.10 show analysis results of the boring samples which exceeded industrial PRGs. Approximately 37 borings were drilled in areas where contaminated liquids were suspected of being deposited in unlined sumps. Some borings were located outside of the waste handling areas to determine the extent of contamination migration. Thirteen borings were drilled within the concrete reservoir area, and six borings were drilled on St. Paul High School's athletic field.

- 5. For the purpose of describing the extent of the contaminated soils, the Site was divided into several distinct areas whose physical and chemical characteristics are discussed in this section. The physical characteristics of these subareas, including the estimated volumes of fill and waste materials, have been summarized in Table 2.4. The extent of contaminated areas were estimated based on the visual identification shown on soil boring logs. These values were preliminary estimates and are not Applicable or Relevant and Appropriate Requirements (ARARs)/Risk-based. The FS will provide the final ARARs/Risk-based volumes of contaminated soil at the Site (EBASCO, 1989d).
- 6. The following sections summarize the findings for each area during this investigation. A detailed description of the site physical and chemical characteristics can be found in the RI (EBASCO, 1989d). The results of the 1995 WDIG predesign study for Areas 4 and 7 are presented in Section 2.3 of this chapter. Recent investigations (1997 through 2001) are presented in Chapters 3.0 and 4.0.

2.2.1 BURIED RESERVOIR

1. Thirteen soil borings were drilled within the perimeter of the reservoir (see Table 2.4). These borings and aerial photos indicate that the sides of the reservoir are not vertical but slope inward. Borings contacted the concrete bottom of the reservoir from 18 to 23 feet below ground surface (bgs) (the difference may be accounted for by sunken debris). The reservoir appeared to be covered with 5 to 15 feet of artificial fill (both soil and debris). The fill was 5 feet thick at the northern edge of the reservoir and thickened to 15 feet at the southern edge. Borings completed in the reservoir indicated a black viscous material, similar to drilling muds and crude oil. The WDI reservoir contained the majority of the site wastes. Based on the soil boring logs, the average thickness of waste material in the reservoir was about 15 feet which was covered with approximately 5 to 10 feet of fill material. Estimated volumes of the fill and waste materials are respectively 58,000 and 175,000 cubic yards.

2.2.2 AREA 1

1. Sixteen soil borings were drilled in this area (see Table 2.4). Fill material occurred in the borings in the middle of the area and tapered off at the edges, becoming very thin in the border borings. The stratigraphy of Area 1 was characterized by interbedded clays from 5 to 20 feet bgs. Overlying this layer near the center of the area, sand and silt were found between 10 and 20 feet bgs, with fill and waste material above this layer to the surface.



- 2. In boring SB-033, black, silty material was found from surface level to 10 feet bgs. Native clay was present at 10 feet bgs. Boring SB-044 repeated this sequence, but the waste material contained more clay, possibly containing drilling muds. Boring SB-054 contained black sludge at 5 feet and sandy silt with black streaks at 10 feet bgs. The silt layer was still present at 15 feet bgs and the native clay layer appears 5 feet below that. The waste material did not extend south to SB-081. This boring exhibited natural clay layers through the first 20 feet with sand and clay layers alternating below this section.
- 3. As determined from the boring information in Area 1, the upper 5-feet of soil was covered by fill material and asphalt. Contaminated soil occurred at depths ranging from 10 to 25 feet bgs. The estimated volumes of waste and fill materials were respectively 48,000 and 16,500 cubic yards.

2.2.3 AREA 2

- 1. Area 2 consisted of land surrounding and immediately adjacent to the reservoir. Nineteen soil borings were located inside the area boundaries and the outer edge of the reservoir (see Table 2.4). Borehole logs showed that most sections of Area 2 were covered with fill material. The fill on the eastern side of the waste handling area varied in thickness from 0 to 10 feet. In the northeast corner, the thickness of fill material varied from 10 to 15 feet. Along the south border, the thickness of fill varied from 5 to 10 feet.
- 2. Borings in the northwest corner of Area 2 confirmed that a large pocket of waste material extended to a maximum depth of 20 to 25 feet bgs. Sludge and, in some cases, free liquids occurred between 7 to 10 feet bgs, just under the fill material. Most borings showed sludge and with occasional free liquids underlain by a 5-foot clay layer. Borings in the northeast corner of Area 2 contained 5 to 15 feet of brown to tan sandy silt with large amounts of rubble (i.e., fragments of concrete and brick) underlain by waste material from 5 to 20 feet bgs. At a depth between 15 to 20 feet bgs, a brown clay layer was found.
- 3. Borings completed in the northern portion of the reservoir may have been impacted by some lateral seepage of waste materials around the northern crown of the reservoir, but the extent of contamination did not appear to be extensive. Borings SB-011 and -012 did not show signs of buried waste and therefore, the northern extent of the material was placed at approximately

Rev. 2.0, 5/4/01 2-9

- 20 feet south of these borings based on the aerial photos. In the southwest corner of Area 2, fill varied in thickness from 5 to 10 feet and was underlain by 10 to 20 feet of black sludge.
- 4. Seven borings were located in the transition area between the reservoir and Area 2. The reservoir and Area 2 were apparently separated by an earthen berm as indicated by these borings. Minor amounts of contaminated material were observed in these borings, most likely due to waste handling in the neighboring areas. Clay layers beneath all portions of Area 2 were underlain by fine to coarse grained sand.

2.2.4 AREA 3

1. Two soil borings were drilled in Area 3. Based on the boring logs, Area 3 appeared to have been covered with approximately 10 feet of fill material. The estimated volume of fill material was 9,500 cubic yards. Below the fill layer was about 10 feet of silt which was underlain by at least 15 feet of sand.

2.2.5 AREA 4

- 1. Four borings, were located within this area. Boring logs indicated that a brown, silty, sandy fill was present from the surface to between a depth of 5 feet bgs to 10 feet bgs. Blocks of orange tile and other concrete rubble were present throughout this fill layer. Soft, dark gray to black waste material occurred directly below this fill layer and extended to about 20 feet bgs. Below 21 to 25 feet a gray silty clay layer was present which grades to fine sand and coarse sand below.
- 2. On the border between Area 3 and Area 4, fill material occurred to a depth of 5 feet bgs. The fill material was underlain by 5 to 10 feet of stiff, black silt and a clay mixture layer. Silt, clay and sand were observed at 25 feet bgs with no visible contamination. Along Greenleaf Avenue, borings indicated fill material from 0 to 7 feet bgs. Buried waste did not occur along the boundary. Silt and clay grade downward to sand only. The sand layer started at 25 feet bgs.
- 3. Aerial photographs suggest that an area covered by liquid waste had an approximate rectangular shape with estimated dimensions of 260 feet by 220 feet. A narrow 20-foot strip near Greenleaf Avenue was relatively free of contamination. Estimated volumes of the fill and waste materials in Area 4 were respectively 9,500 and 34,000 cubic yards.

Rev. 2.0, 5/4/01 2-10

2.2.6 AREA 5

1. Standing liquids were not shown in this area by aerial photos. Two soil borings were drilled in this area. According to the boring logs, the area was underlain by 5 feet of fill material. Below the 5-foot depth, silty clay and clay materials were present to the depth of 20 feet, underlain by sand to the borings termination depth of 35 feet. Soil samples from this area did not show visible contamination. The estimated volume of fill material covering the area was 5,800 cubic yards.

2.2.7 AREA 6

1. Four soil borings were located within the area boundaries. Boring logs showed that the upper 5 feet of soil consisted of dark brown silt and sand fill material underlain by a dark brown to gray clay with some silt from 5 to 20 feet bgs. A native sand layer was below the clay layer appearing between 20 and 35 feet bgs. Another clay layer occurred below the sand layer down to the deepest extent of the soil borings, 35 feet bgs. This area appeared relatively free of visible contamination.

2.2.8 AREA 7

- 1. Three soil borings were located in this area. According to the boring log for SB-090, the contaminated area was covered by approximately 5 feet of fill material consisting of silty clay and rubble. The fill layer was underlain by 5 to 10 feet of partially contaminated fill and wet, visibly contaminated, black to dark gray waste material. Dark gray, wet, drilling mud was present in this boring from 10 to 20 feet bgs. Below 20 feet, the boring log described a native, fine to medium grained sand with no visible contamination.
- 2. The remaining soil borings showed no visible contamination. These borings indicated that the upper 5 feet bgs consisted of fill material underlain by native silty, clayer layer to 10 to 20 feet bgs. Fine to medium grained sand was present below this silty layer.
- 3. Aerial photographs suggest an area with a rectangular shape with dimensions of approximately 180 feet by 100 feet. Based on the 1945 aerial photo and boring logs, the waste handling area appeared to have been centered around SB-090. The waste materials were contained between

depths 10 to 20 feet bgs. The upper 10-feet of soil was mainly fill material but it was partially contaminated below 5 feet bgs. The estimated volumes of fill and waste materials were respectively, 5,700 and 3,900 cubic yards.

2.2.9 AREA 8

- 1. Aerial photos suggest that standing liquids were present in this area at some time. Many small businesses were within the area boundary including Stansell Brothers, Colorplus Graphics, A and H Auto Body, Reyes Containers, Terry Trucking, I.C.E., Bolero Plastics, Timmons Wood Products, Dan Ray, California Reamer, Davco, World Wide Plastics, H.H. Contractors and Rick's Smog Service. The property formerly owned and operated by Toxo Spray Dust, Inc. was also included in this area (EBASCO, 1989a). Some excavation and grading had occurred in preparation for small business development.
- 2. Eleven soil borings were located within this area. Fill material was found from the surface to 5 feet bgs and was underlain by waste material (dark gray silty material and black sludge) at depths between 7 to 15 feet. Below the waste material, a sand and silt layer was present to a depth of 20 to 50 feet which was underlain by clay. Three borings, SB-076, SB-087 and SB-093 appeared to be free of visible contamination. Below the top 5 feet of fill material, each of these borings encountered 10 to 15 feet of native clays. These clays were underlain by sand to the depth of 35 feet.
- 3. Borings SB-082, -093 and -094 near the perimeter, did not have buried waste present and showed no visible contamination. The upper 20 feet of soil in these borings consisted of clay and silt with clay and sand dominating at 20 feet bgs.
- 4. Area 8 appeared to be moderately contaminated at depths ranging from 15 to 20 feet bgs, except for an area (135 feet by 300 feet) near the middle of Area 8. The estimated volumes of the buried waste and the fill that covers the area are respectively 85,000 and 36,000 cubic yards.

2.2.10 AREAS UPGRADIENT OF RESERVOIR

1. St. Paul's High School and Fedco distribution center are located upgradient of the Site. Six borings were completed on the school's athletic field. Waste dumping could not be inferred from aerial photos, although in 1962, the 1988-1989 RI report speculated that a spill

from the WDI reservoir may have resulted in overland run-off from the Site coming in contact with the St. Paul's High School athletic field. However, layers of silt, clay and sand beneath St. Paul's High School and Fedco appeared to be undisturbed.

2.2.11 GROUND WATER CONDITIONS

- Twenty-seven of the soil borings were converted into ground water monitoring wells to
 determine the extent of ground water contamination. Locations of these wells are shown in
 Figure 2.11. Of the 27 ground water monitoring wells installed, 21 were shallow wells
 designed to sample the uppermost aquifer. These wells were completed at the water table, to
 a depth of approximately 65 to 70 feet bgs. The remaining wells were completed to
 greater depths.
- 2. In general, ground water had been encountered at a depth of 46 to 65 feet bgs and from 91 to 106 feet above mean sea level. Accordingly, ground water was approximately 34 to 44 feet below the bottom of the WDI reservoir and 22 to 47 feet below the bottom of the WDI waste handling areas.
- 3. Ground water level elevations at the Site were measured several times between September 1988 and January 1989, although only two sets of measured water level elevations include a sufficient number of data points to develop ground elevation water maps (see Figures 2.12 and 2.13). (Note: data used in construction of these maps include only the data from shallow wells and as such represent conditions in the uppermost aquifer underlying the Site.)
- 4. Both ground water elevation maps indicated that ground water flow was generally in a southwest direction. These results were consistent with the findings in the 1985 Dames & Moore study. According to this data, near the Campbell property and the Dia-Log property, the flow was slightly to the south and to the west. The 1988-1989 RI report indicated that ground water in these areas may possibly be following along narrow channels with higher permeabilities than the surrounding media.
- 5. The ground water chemical analysis results were compared against State and Federal drinking water standards. Comparison of chemical data from the upgradient and downgradient wells are used to identify if elevated levels of chemical compounds in ground water have been caused by migration of contaminants from the WDI waste handling areas.

Rev. 2.0, 5/4/01 2-13

- 6. Samples of ground water were collected from GW-01 and -02, which are installed upgradient of the WDI reservoir. Aluminum and selenium were found in both of these wells in concentrations above the Safe Drinking Water Act (SDWA), Primary Maximum Contaminant Level (MCL) standards. Concentrations of iron and manganese in these wells also exceed the Secondary MCL. Chromium was detected in concentrations above the MCL standard in well GW-01 only. Arsenic, barium, copper, lead and zinc were found in both upgradient wells but at concentrations lower than the MCL standards. Calcium, magnesium, potassium and sodium were also found in both wells. Concentrations of cobalt, nickel, and vanadium were also detected. Volatile organics, semivolatile organics and pesticides/polychlorinated biphenyls (PCB) compounds were not detected in these upgradient wells.
- 7. Since metal concentrations in the upgradient wells appeared to be very different, GW-01 was resampled to confirm the validity of the data. Concentrations of detected metals in the unfiltered samples in the second round of sampling appear to be slightly lower than the first round of sampling. In comparing the results of first and second round of samples, specific reasons could not be attached to the consistently lower metals concentrations in the results of second round of samples. The duplicate nonfiltered samples show concentrations similar to the original second round samples indicating consistency of sampling analyses and the integrity of samples during the second round of sample collection.
- 8. Numerous metals were detected in samples collected from ground water monitoring wells located within the Site boundaries. The following summarizes these results:
 - Aluminum was detected in 25 of 27 ground water monitoring wells.
 Twenty-three wells show aluminum concentrations above the MCL of 1,000 ppb established by the SDWA. Aluminum was also detected in the upgradient wells.
 - Arsenic, barium, copper, lead, mercury, silver and zinc were found in more than one well but at concentrations below the MCLs.
 - Calcium was found in all wells. Concentration of calcium ranges from 187 to 354 ppm. The highest concentration was found in GW-01 which is an upgradient well.
 - Chromium was detected in 19 wells but only GW-01, which is an upgradient well, and GW-27, which is located near the southern end of the Site, contain concentrations above the MCL standard.
 - Cobalt was found in wells GW-01 (49 ppb), -09 (21 ppb) and -23 (16 ppb).
 - Iron was detected in 26 wells. Concentration of iron exceeds the MCL standard in 24 of these wells. The range of iron concentration is 221 to 79,300 ppb. The highest iron concentration was found in GW-01, an upgradient well.

- Magnesium was detected in all wells ranging in concentration from 59 to 114 ppm. Magnesium was detected both upgradient and downgradient from the Site.
- Nickel was found in 11 wells. The nickel concentration ranges from 24 to 79 ppb. The highest concentration was found in GW-01, an upgradient well.
- Concentrations of manganese were detected in all wells. Concentrations above the MCL standard were found in 24 wells. Manganese concentrations ranged from 20 to 5,850 ppb. The highest concentrations of manganese were found in GW-13, -14, -15 and -21 with concentrations between 4,010 to 5,850 ppb. The first three of those wells are located downgradient of the reservoir.
- Potassium was detected in all wells ranging in concentration from 5,240 to 18,400 ppb. The highest concentration was detected at GW-01, an upgradient well.
- Concentrations of selenium were detected in 26 wells. Twenty-five wells had concentrations above the MCL. The highest concentration of selenium was detected in GW-01, an upgradient well.
- Sodium was detected in all wells ranging in concentration 102 to 190 ppm. The average sodium concentration for the two upgradient wells was approximately 140 ppm.
- Vanadium was detected in 10 monitoring wells. The highest concentration of vanadium was found in GW-01, an upgradient well.
- 9. Five volatile organic compounds (VOCs) were detected in the ground water. However, the concentrations of the VOCs are much lower than SDWA MCLs and DHS action levels. Trichloroethene (TCE) is the only VOC found in a concentration (18 ppb) above the MCL standard (5 ppb) in well GW-26. Acetone, a common laboratory contaminant, was found in well GW-30. Concentrations of toluene (1 to 5 ppb) were detected in nine wells. Tetrachloroethene (PCE) was found in wells GW-11 and -21. Chloroform was found in wells GW-06 and -07.
- 10. Four SVOCs were detected in the ground water. Bis (2-chloroethyl) ether was detected at wells GW-06, -07, -19 and -31. Concentrations of this compound ranged from 260 ppb at GW-06 to 690 ppb at GW-19. A concentration of 36 ppb of diethylphthalate was detected in GW-05. Concentrations of Di-n-butylphthalate (2 ppb) were found in wells GW-07 and -31. A concentration of 9 ppb of Di-n-octylphthalate was detected at well GW-07. The three phthalate compounds are common lab contaminants.
- 11. Pesticides and PCB compounds were not present in detectable concentrations in the ground water samples.

2.2.12 SUBSURFACE GAS CONDITIONS

- A subsurface gas investigation was performed by converting 26 soil borings into subsurface gas monitoring wells. Locations of the subsurface gas monitoring wells are shown in Figure 2.14. A total of 28 subsurface gas samples were analyzed for basic gases and trace contaminants.
- 2. The results indicate that there are large variations in the trace organic gases distributed across the Site and to some extent the ratio of major gases were identified as well. Figure 2.15 shows the analytical concentrations of chloroform along with TCA, TCE, and PCE. Figure 2.16 shows the analytical concentrations of benzene along with TCE and perchloroethene detected. Figures 2.15 and 2.16 have been presented because there appears to be a correlation between the presence or absence of these gases with each other. Figure 2.17 shows the percentage of methane comprised in the total gas volume. This figure is important because methane is often an anaerobic degradation product of organic rich material or waste and could represent an explosion hazard if concentrated inside a confined space like a building.
- 3. The analytical results also identified the presence of vinyl chloride in wells VW-4 (73 parts per billion per volume [ppbv]) and VW-9 (3,300 and 1,200 ppbv in replicate samples) adjacent to and within the reservoir and VW-14 (110 ppbv) about 180 feet west of the reservoir. The replicate samples collected from VW-9 showed a large variation in analytical concentrations of vinyl chloride, however this is not uncommon in subsurface gas sampling. The important point is that collection of subsurface gas is difficult to reproduce with much precision.
- 4. The detection frequency of these gases ranged from approximately 4 percent to 100 percent. PCE was the most prevalent organic gas present in the subsurface media at the Site. TCE had the highest average concentration among the detected compounds and vinyl chloride showed the highest concentration of the compounds but it was only detected in three wells.

2.2.13 1988-1989 RI REPORT CONCLUSION

1. The 1988-1989 RI concluded that the reservoir contained most of the contamination with high concentrations of metals and VOCs. Ground water beneath the Site was relatively free of contamination. Certain areas used previously as waste handling areas also contained elevated levels of contamination. These areas were not lined and therefore, waste presence and

migration in the subsurface may be considered as a potential health hazard in these areas. However, for the most part, soil contamination in these areas appeared to be bound to the soils and are relatively immobile.

2.3 WDIG PREDESIGN ACTIVITIES (1995)

1. The 1995 Predesign Activities conducted by the WDIG were focused primarily on investigating soil conditions in Site Areas 4 and 7, as shown in Figure 2.18, and confirming earlier EPA soil gas and ground water findings.

2.3.1 AREA 4

- 1. Sixteen shallow hydraulically-pushed borings and six intermediate to deep hollow-stem auger borings were installed in or adjacent to Area 4 at the locations shown in Figure 2.19. These activities occurred in June 1995.
- 2. Generally three material types were encountered, and are listed below:
 - Fill Material
 - Buried Waste
 - Native Soil
- 3. Fill material was generally composed of silty sand with various construction materials (e.g., concrete and brick fragments, debris). Fill material was encountered at the surface to depths ranging between 5 and 15 feet bgs. The material was generally characterized as loose; dry to very moist (free liquids were not encountered); and infrequently observed organic odors were slight.
- 4. Buried waste was identified as sands and silts, stained to saturated with oily substances and having hydrocarbon odors. The buried waste exhibited low density, high plasticity and generally contained a higher moisture content than the overlying material. A few zones were identified to be above the liquid limit.
- 5. Native soil was identified as either silt or poorly-graded sand. The silts were encountered overlying the sands. The soil was characterized as medium stiff to stiff and medium dense to dense. Moisture content was described as moist and the soils did not exhibit oil staining or odor. Ground water was not encountered in the borings to a depth of 40 feet.



Rev. 2.0, 5/4/01 2-17

- 6. Selected soil samples were analyzed for the following contaminants of concern:
 - Arsenic
 - Beryllium
 - Chromium
 - Cadmium
 - Lead
 - Thallium
 - VOCs

Other contaminants of concern were not identified in this area during the RI.

7. The results of the soil chemistry analysis for both Areas 4 and 7 are summarized in Figures 2.19 and 2.20. The results indicate that other than thallium and beryllium the ROD contaminants of concern were not exceeded in Area 4. However, as discussed in the Workplan, thallium and beryllium cleanup standards (residential PRGs) are below area background levels.

2.3.2 AREA 7

- 1. Thirteen shallow hydraulically-pushed borings and one deep hollow-stem auger boring were drilled in Area 7 at the locations shown in Figure 2.20. One less deep boring was installed than proposed because the limits of the buried waste were adequately defined without it. These borings were completed during June 1995.
- 2. The material types encountered were similar to those found in Area 4, namely fill material, buried waste and native soil.
- 3. Limits of buried waste encountered are shown in Figures 2.19 and 2.20. The areal extent is approximately 15,000 square feet, while the greatest vertical extent is 18 feet in boring SB-090.
- 4. Area 7 soil samples were analyzed for the same contaminants of concern as listed above for Area 4, plus potentially carcinogen polyaromatic hydrocarbons (pcPAHs), carcinogenic polyaromatic hydrocarbons (cPAHs) and PCBs. The results indicated that two isolated metals (chromium and arsenic) exceedances were noted in borings HPB-7-01 and HPB-7-05. Organic exceedances of ROD cleanup standards were not detected. As discussed above for Area 4, thallium and beryllium concentrations are associated with background conditions.



5. One isolated location of elevated hydrocarbon concentration was observed in boring HPB-7-01. Accurate quantification of the contaminants could not be determined, however, because of apparent matrix interferences on analytical samples due to high organic content in the sample. The identified organics (e.g., 2-methylnaphthalene, naphthalene and phenanthrene) are noncarcinogenic constituents. There were no exceedances of organic contaminants of concern in this boring, however, the detection limit for the 8-foot deep sample was raised due to matrix interferences.

2.3.3 SOIL GAS MEASUREMENTS

- 1. Soil gas measurements were performed in the available site vapor wells in June 1995. These measurements were performed by initially performing field screening tests on each well using a field operated flame ionization detector (FID) and a gas chromatogram. These instruments were used to analyze for methane and VOC concentrations, respectively. Results of this screening exercise were used to select six wells (20 percent of total wells) to provide samples for analysis in an analytical laboratory. Vapor wells (VW) VW-18, -25, -07, -02, -04 and -14 were selected for laboratory analysis. Laboratory samples were collected using stainless steel summa canisters. The samples were analyzed for methane using South Coast Air Quality Management District (SCAQMD) Modified Method 25.1 and VOCs using EPA Method TO-14. EPA representatives provided oversight and collected split samples.
- 2. Results of the soil gas measurements are shown in Figure 2.21. This figure illustrates locations of the vapor wells and summarizes the results of both the field screening and laboratory analyses.
- 3. Results of the screening and analysis indicated generally low levels of methane (e.g., generally less than 5 percent) and low concentrations of VOCs (e.g., generally less than 1 ppm). The results are summarized by site area below:
 - Area 2 Soil gas concentrations ranging from 0.3 to 9.34 percent methane with VOCs ranging from nondetect to less than 1.4 ppm. Subsurface gas measurements conducted during the RI indicated concentrations ranging from 0.0 to 39.18 percent methane with VOCs ranging from 0.003 to 16 ppm.
 - Area 4 Soil gas concentrations of methane and VOCs were not detected.
 - Area 7 Soil gas concentrations ranging from 0.0 percent to a single well with 18.5 percent methane and VOCs ranging from nondetect to less than 1 ppm.



• Other Site Areas - Soil gas concentrations ranging from 0.0 to 4.0 percent methane and VOCs ranging from nondetect to 5.2 ppm.

As shown in Figure 2.21, most methane concentration observations are consistent with results from the 1988-1989 RI.

2.3.4 GROUND WATER ANALYSIS

- 1. Two ground water monitoring events were performed at the Site as part of the Predesign field investigations. The first was completed in June 1995 and the second in September 1995.
- 2. As discussed in Section 2.5 and Appendix A of the Predesign (60%) Design Report, the first sampling episode had field sampling difficulties (TRC, 1995b). The data confirm that the ground water quality has not been impacted based on the consistency of sample results upgradient, beneath and downgradient of the Site.
- 3. Figure 2.22 shows the locations of the ground water monitoring wells and the ground water flow-gradient and direction based on the 11 sampled wells.
- 4. A distinct rising trend in ground water levels is noted between October 1988 and June 1995, with a leveling trend occurring sometime prior to June 1995. If the ground water levels were to continue to rise from current levels, ground water could possibly come in contact with buried waste at the Site. Table 2.5 summarizes the ground water elevations in 11 site wells since 1988. An investigation as to the causative mechanism for this trend was performed and is discussed below.
- 5. The data indicates an average increase in elevation of 12.68 feet over the period of October 1988 to June 1995, with the highest changes occurring between late 1991 to present.
- 6. The following documents were obtained and reviewed for this investigation:
 - Division 18 of Annotated California Codes, Official California Water Code Classification Volume 70A.
 - Report of Watermaster Service in the Central Basin, Los Angeles County, October 1994.
 - 1994 Annual Survey and Report on Ground Water Replenishment, Water Replenishment District of Southern California.

- Appendix A of State of California Department of Water Resources Bulletin No. 104, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, 1961.
- 7. The Site is located in the Montebello Forebay of the Central Basin. The Montebello Forebay is the principal recharge area for the Basin. The Rio Hondo and San Gabriel River spreading grounds are located approximately 3 miles from the Site. The spreading grounds overlie an area of the Forebay where the Basin's aquifers can be recharged from the surface; in the rest of the Basin the aquifers are separated by aquitards that would inhibit or prohibit the percolation of surface recharge to all of the aquifers.
- 8. The Water Replenishment District of Southern California (WRD) was formed in 1959 to manage the Central and West Coast ground water basins in accordance with the provisions of Division 18 of the California Water Code. The WRD's primary objectives are to provide high quality water to its pumpers, minimize the adverse effects caused by years of overpumping and oversee ground water recharge operations in the two basins.
- 9. The WRD purchases water imported through the State Water Project and the Colorado River Project to supplement annual rainfall to replenish the ground water basins. Purchased water is then placed in the aforementioned spreading grounds to recharge the lower potable aquifers.
- 10. The WRD monitors and regulates the amount of water stored in the basins in order to maintain an adequate supply during drought years. The WRD's objectives do not include replenishing the shallow aquifers of the basin; due to the present urban condition over these units the return of historical water levels would be detrimental to current development and construction. The Site is situated over the shallow aquifers.
- 11. The Forebay experienced some large declines in the early and late 1970s because of reductions in the amount of water used in the spreading grounds for recharge. However, overall the water levels have stabilized at near optimum levels since the mid-1960s. During the last few years water levels in the Forebay have increased another 5 to 10 feet due to the continued aquifer replenishment operations, and "as a result the Forebay is slightly above optimum operating levels" (WRD, 1994). The WRD recognizes the need to avoid overcharging ground water to levels that might come in contact with shallow soil contamination in the densely developed areas of the basin. Given continued aquifer replenishment operations the "WRD anticipates that water levels in the Montebello Forebay will remain at about the same level or drop slightly" (WRD, 1994) because optimum ground water levels have been reached in the

basin. Since this review of available ground water data in the basin indicates that the ground water level rise was created by basin replenishment activities, further rise is not anticipated to occur. Additionally, it should be noted that ground water laboratory analysis data has not shown significant changes to ground water quality since the August 1992 analytical results.

12. The results of the September 1995 sample round indicated that the rising ground water elevation trend has been slowed significantly, as is expected given the WRD activities. Based on this investigation, it does not appear that ground water level conditions will cause the Site conditions to impact ground water conditions.

2.4 PRIOR SITE INVESTIGATION DATA EVALUATION

- 1. The prior site investigation data presented in this chapter was used as the basis of the following additional site investigations:
 - 1995 WDIG Predesign Activity.
 - 1997-1998 EPA RD Investigation Activities.
 - 1997-1998 WDIG RD Investigation Activities.
 - 1999-2001 WDIG Investigation Activities.
- 2. The data developed and presented in Chapters 3.0 and 4.0 were collected to compare and confirm the results of the prior site investigations, and were used in the development of Chapter 5.0, the Comprehensive Summary of Site Conditions.

3.0 1997 - 1998 EPA RD INVESTIGATIVE ACTIVITIES

- 1. The following sections present the objectives, findings and interpretations of the various studies completed from 1997 to 1998 by CDM Federal Programs Corporation (CDM Federal) and Response Engineering and Analytical Contract (REAC), on behalf of the EPA/Environmental Response Team Center (EPA/ERTC). The conclusions of EPA's (CDM Federal and ERTC/REAC) investigations of soils, soil gas, reservoir conditions and ground water are also summarized below. Each media is discussed in a separate section.
- Chapter 4.0 (1997-2001 WDIG RD Investigative Activities) provides information on the findings made by WDIG during their field investigations conducted from 1997 to 2001.
 The information below does not necessarily concur with WDIG's findings in every instance.
 Chapter 5.0 (Comprehensive Summary of Site Conditions) includes several tables comparing EPA's and WDIG's findings.

3.1 SOIL CONDITIONS

3.1.1 AREA 7 GEOPROBE CHARACTERIZATION

- 1. In August 1998, ERTC/REAC conducted a geoprobe investigation (i.e., collection of several 1-inch-diameter continuous cores, see Figure 3.1) of Area 7 to: (1) characterize the buried wastes, including the characteristics and location of contaminated soils and liquids; and (2) locate a possible perched liquids zone for application of vacuum-enhanced extraction technology for removal of gases and liquids from the buried waste (ERTC, 1998).
- 2. Based on information collected during this investigation, ERTC/REAC made the following observations and conclusions:
 - Fill material is approximately 16 to 20 feet deep, consists of a silt to sandy silt matrix with concrete and other debris.
 - Fill material appears to be underlain by a natural, undisturbed, fine, well-sorted sand or, in some places, possibly a silt.
 - Stained soil containing oily liquids exists in the area (see Figure 3.2).
 - Extent of soil staining is on the order of 200,000 cubic feet (ft³).
 - Volume of soil containing liquids is approximately 50,000 ft³.
 - Liquid volume is approximately 2,500 ft³ (18,700 gallons).
 - Approximately 1,900 gallons (10 percent of liquids) may be recoverable.
 - Presence of drilling mud makes vacuum-enhanced extraction inappropriate for removal of liquids.



3.2 RESERVOIR CONDITIONS

3.2.1 RESERVOIR PHYSICAL CHARACTERIZATION

1. To further evaluate the physical characteristics of the reservoir conditions, ERTC/REAC conducted several investigations of the subsurface in the reservoir area (ERTC, 1999a).

These subsurface investigations included the following:

- Historical Map Review.
- Geophysical Survey (Dipole-Dipole Resistivity and Terrain Conductivity).
- Contents (Chemical and Physical) Characterization.
- Structural Characterization.
- 2. ERTC/REAC objectives for each of the investigations noted above were as follows:
 - Historical Map Review:
 - Provide information that would help the geophysical investigators locate the reservoir's boundary and provide guidance for planned invasive trenching investigations.
 - Geophysical Survey (Dipole-Dipole Resistivity and Terrain Conductivity):
 - Determine the location and dimensions of the concrete-lined reservoir underlying the Site. In addition, to identify areas outside of the reservoir where fluids may have leaked laterally from the reservoir and to delineate the thickness and configuration of the water table aquifer.
 - Contents (Physical and Chemical) Characterization:
 - <u>Physical</u>: Collect lithology information and fluid data (i.e., composition and respective thickness) within the reservoir boundary by installing 1-inch-diameter piezometers at varying depths.
 - <u>Chemical</u>: The objectives and complete description of ERTC/REAC chemical characterization of the reservoir are provided later in this chapter in Section 3.2.2.
 - Structural Characterization:
 - Locate the reservoir boundary, investigate if free liquids were present along the interior and exterior edges of the reservoir, inspect the surrounding soil for evidence of contamination (staining), and to determine the physical characteristics and integrity of the reservoir through field trenching activities.
- 3. A summary of the findings from the ERTC/REAC investigations is provided below:
 - Historical Map Review:
 - ERTC/REAC concluded that review of site maps provided relevant information regarding the location of the reservoir, as well as the site's topographic data (ERTC, 1999a).



- Geophysical Survey (Dipole-Dipole Resistivity and Terrain Conductivity):
 - Dipole-Dipole Resistivity Results:
 - ERTC/REAC believes "the interpretation of the dipole-dipole resistivity data is somewhat ambiguous, mainly because of the inherent nature of the technique and the lack of boring data against which the survey might be calibrated." Figure 3.3, reproduced from the ERTC's report, provides an east/west cross section showing the dipole-dipole resistivity results. Three "anomalies" were identified for the geophysical survey:
 - Anomaly 1 represents the reservoir edge and dry berm material.
 - Anomaly 2 includes most of the remaining material, both inside and outside of the reservoir.
 - Anomaly 3 includes a small area of high resistivity values, close to the surface and outside of the reservoir. Spectrum, ERTC's contractor that performed the geophysical survey, attributes the anomaly to high resistivity hydrocarbon sludge or hydrocarbon saturated soils.
 - WDIG performed two "calibration" borings by collecting continuous geoprobe samples to approximately 20 feet along the same axis as the survey. Locations were chosen by ERTC/REAC personnel. The purpose of the "calibration" borings was to verify ERTC/REAC data. Results of the samples did not match ERTC/REAC findings.
 - Terrain Conductivity Results:
 - Terrain conductivity surveys provide two types of measurements. The in-phase results were successful in generally locating the berm and edges of the reservoir. The diameter of the reservoir as determined by the geophysical methods is about 25 feet less than that determined from maps and drawings of the Site. In some portions of the circular anomaly marking the general edge of the reservoir, the data contour lines are less dense. These may be areas where the berm has been breached or is partially missing.
- Contents (Physical) Characterization:
 - Piezometers were used to determine the distribution of the liquids within the reservoir, however the phase (nonaqueous/aqueous) thickness data should be taken as a rough estimate of true thickness. Figure 3.4 shows location of piezometers in reservoir. Figure 3.5 shows reservoir cross section and piezometer construction.
 - Reservoir fill material includes silt, drilling mud, concrete, brick and wood.
 - Liquid levels were encountered at varying depths ranging from 4 to 12.5 feet bgs.



- Structural Characteristics (observations conducted by trenching activities):
 - Reservoir Measurements:
 - The concrete liner varies from 3 to 4 inches in thickness and has a 1/4-inch reinforcement wire mesh through the middle of the liner. The liner walls slope toward the center at an angle of 27 degrees as measured in the field.
 - The concrete liner has been measured by geophysical methods (Spectrum Geophysical Investigation, Appendix B, ERTC, 1999a) to be 575 feet in diameter, but was probably at least originally 600 feet in diameter before the top of the cement wall was broken down several feet for filling and surface grading. During intrusive activities, a berm width of 40 feet was measured at a depth of 6 feet. Measured thickness of the berm is approximately 22 feet and is composed of fine, reddish-brown clay.
 - Current depth of the reservoir is believed to be approximately 14 feet bgs on the eastern side and 12 feet bgs on the western side, relative to the existing ground surface.
 - Reservoir Observations:
 - Figure 3.6 shows ERTC/REAC excavation locations. Overall the reservoir wall appeared to be intact with the exception of the following:
 - At the 12:00 o'clock position, the concrete wall was found to be missing to an unknown depth. Excavated material contained a considerable amount of very large rocks and concrete blocks. The clayey berm (mix of red and gray clay) surrounding the outer boundary of the reservoir was compromised, revealing a heterogeneous material, and dark staining to 7 feet beyond (away from) the reservoir wall.
 - At the 1:00 o'clock position, the concrete wall was cleanly cut (vertically). An apparent "makeshift" wall of large rocks and concrete debris was set back away from the reservoir, approximately 2 feet from where the existing concrete wall was located. Berm material showed evidence of dark staining 7 feet beyond the concrete wall toward the St. Paul High School athletic field, to a depth of approximately 8 feet.
 - At the 3:00 o'clock position, the reservoir wall was encountered at approximately 6 feet bgs, and revealed several vertical and horizontal fractures.

3.2.2 RESERVOIR CHEMICAL CHARACTERIZATION

1. ERTC/REAC analytical results obtained from the analysis of aqueous, organic liquid, and vapor samples collected from within the reservoir grid are discussed below (ERTC, 1999b). The sample locations for the reservoir chemical characterization are shown in Figure 3.7.



- 2. Chemical characterization of the contents of the reservoir was performed to meet the following objectives:
 - Differentiate among the liquid-types found in the reservoir; aqueous, light nonaqueous liquids and dense nonaqueous liquids.
 - Chemically characterize the constituents of the liquids for the following two purposes:
 - Determine VOC composition for the purpose of evaluating VOC generation potential for final remedy design consideration.
 - Determine the chemical composition of hazardous substances for the purpose of evaluating liquids disposal options as part of the final remedy.
- 3. The results of the reservoir chemical characterization indicated the following conditions:
 - Elevated PCB levels in Piezometers P-3, EX-1 and EX-2. Refer to Figure 3.7 for the location of the wells.
 - Elevated methane levels in the southwest quadrant of the reservoir.
 - The presence of crude oil constituents (SVOCs) in the reservoir liquids.
 - Low levels of chlorinated solvent degradation products and vinyl chloride in some areas of the reservoir.
 - Benzene detected in all samples except P-3. Toluene, ethylbenzene and xylene were detected in all samples.

3.2.3 PIEZOMETER STUDY

- 1. CDM Federal installed sixty-two 1-inch-diameter piezometers within the reservoir boundary as part of EPA's reservoir liquids investigation. The objective of this characterization study was to collect soil data to characterize the reservoir contents and to evaluate the presence and types of liquids found above or within the waste mass (CDM, 1999c). The overall intent of the program was to collect data that could be used to identify areas of the reservoir amenable for liquids removal.
- 2. The following observations and conclusions were made by CDM Federal based on information collected during the investigation:
 - Waste material consists of fill soil (silt), construction debris (cement, bricks, wood), muds and oily wastes.
 - Fifty-two of the 60 boreholes exhibited liquids in the soil cores.
 - Over time (24 hours) all of the probes exhibited liquids.
 - Liquid levels ranged from surface to approximately 6 to 8 feet bgs.
- 3. CDM Federal concluded that the results of the piezometer installation work demonstrated that the reservoir may contain free liquids, in both aqueous and nonaqueous phases (see Figure 3.4

and Table 3.1). In some locations, the liquids appear to be perched on top of the waste materials, and at other locations, the liquids appear to extend near to the bottom of the reservoir. Distribution of the liquids appears to reflect the manner in which wastes were disposed of in the reservoir. Waste disposal occurred over several years, apparently in batches of varying materials. Some materials appear to be drilling muds, whereas other materials appear to be construction debris. Some materials appeared to contain oil. Observed liquid levels are not indicative of the actual level found within the reservoir nor the volume of liquids. Results of this investigation indicated that liquids are probably associated with thin seams and discrete zones of limited permeability within the wastes. Although perched liquids were encountered at some locations, liquids were observed throughout the waste mass.

3.2.4 HIGH VACUUM EXTRACTION

- 1. ERTC/REAC conducted two vacuum-enhanced extraction tests as a possible method for extracting reservoir liquids (ERTC, 1999c). This technology was believed by ERTC/REAC to be potentially applicable to the Site because of site conditions (e.g., methane and hydrocarbons detected in reservoir wells). ERTC/REAC performed the test using extraction wells (EX) EX-1 and -2. The wells were installed by WDIG for TM Nos. 6 and 8 field activities.
- 2. The objective of the tests were as follows:
 - Evaluate the effectiveness of vacuum-enhanced extraction for redeveloping EX-1.
 - Compare the effectiveness of this technology to standard pumping.
- 3. ERTC/REAC's principal conclusions drawn from this pilot test are as follows:
 - The objective of developing EX-1 as a free flowing well was not achieved; however, the test did demonstrate that fluid could be drawn into the well under vacuum and that it would return to the formation when the vacuum was released. This confirms the screen and gravel pack were not impeding flow.
 - The sustained rate of liquid extraction achieved from EX-2 averaged 4.93 gallons/hour (hr) during the first 5 days and 2.42 gallons/hr during the next 11 days. This compares to a yield of 3 gallons/hr as obtained by the WDIG using a 24-hour short-term cycle pumping test. Considering that the reservoir contains a fixed volume of fluid and the limited zone of influence, the yield is expected to decrease as liquid is removed by each test. Applying the vacuum appears to enhance the rate of liquid recovery and may increase the total volume recovered from a given well.



- Yield of combustible vapors was substantially less than the fuel requirement of the engine. The highest yield over a 24-hour period was 50,415 British Thermal Units (BTU)/hr compared to a fuel demand of 360,000 BTU/hr. Also, there were extended periods with no measurable fuel being extracted. The rate of biologically produced methane from this site is substantially less than the unit consumes.
- Influence of the vacuum on liquid levels in the surrounding monitoring wells and piezometers displayed anisotropic conditions without the consistent correlation of drawdown versus distance.
- This technology is not cost-effective for recovering energy or liquids from the reservoir. The poor performance is due to the limited rate at which methane is generated and the low permeability of the material.

3.3 SOIL GAS

- 1. The purpose of CDM Federal's soil gas investigation was to help support EPA's evaluation of the RD for the Site under the Subsurface Gas Contingency Plan (EPA, 1997c). Therefore, additional data were collected in order to provide a more comprehensive characterization of the current soil gas conditions. In-business air data were also collected to evaluate whether soil gas is migrating into the buildings onsite creating an explosion (methane) or health hazard (VOCs). Specifically, data collected during this investigation were used to address the following objectives:
 - Identify locations within the Site and along the boundaries of the Site with elevated VOCs and methane concentrations in soil gas that may indicate the migration of soil gas emanating from wastes disposed at the Site.
 - Obtain current data documenting subsurface gas migration near and below buildings for EPA's use in communicating site conditions to building owners and occupants.
 - Correlate, where possible, soil gas data with indoor air data to determine
 if there is a link between subsurface gas migration and indoor
 air quality.
 - Provide a current database for chemicals found at the Site to evaluate the proposed subsurface soil gas remedies.
- 2. The Subsurface Gas Contingency Plan investigation involved the sampling of the existing soil vapor monitoring well network at the Site, installation and sampling of temporary soil gas monitoring probes, and collection of in-business air data for analysis of volatile COC for the Site.
- 3. EPA established within the Contingency Plan, soil gas ITSLs based on EPA ambient air PRGs. ITSLs have been established for most site VOCs at concentrations protective of



human health as shown in Table 3.2. A comparison of the ITSLs with soil gas concentrations for VOCs and methane show that ITSLs have been exceeded at several locations at the Site. VOCs were detected above soil gas ITSLs in ten wells and 11 temporary probes. Methane was above the 5 percent ITSL in five vapor wells and 26 probes. A summary of the VOCs detected in soil gas and the locations of ITSL exceedances are presented in Table 3.3. The location of the existing vapor well network is provided in Figure 3.8.

- 4. Benzene was the VOC most frequently reported above its soil gas ITSL (nine probes/seven wells), followed by vinyl chloride (five probes/nine wells), chloroform (two probes/two wells), PCE (two probes/one well), and 1,2-dibromoethane (one probe/two wells). Vinyl chloride and benzene were the only VOCs detected above ITSLs in the vapor wells in both the September 1997 and August 1998 sampling events. The Site boundary ITSL for PCE of 190 ppbv was exceeded at gas probe GP-31 (PCE = 532 ppbv). This is the only location ITSLs were exceeded along the Site boundaries.
- 5. To determine whether methane or VOCs from soil gas have migrated into the buildings onsite, in-business air samples were collected inside the 24 occupied structures on the Site. Methane was not detected above 50 ppm (0.005 percent) inside the buildings. More than 25 VOCs were detected above background concentrations in the in-business air samples. Benzene was the chemical detected above ITSLs most frequently. According to CDM Federal, the presence of benzene, toluene, and xylene may be because of the use of petroleum products such as gasoline or motor oil by the onsite businesses. Many businesses at the Site repair automobiles and store gas cans within the buildings. The presence of TCE, PCE, and vinyl chloride in the buildings may be because of the use of solvents in manufacturing processes. Vinyl chloride was detected once at the building at 12635 Los Nietos Road. Vinyl chloride was not detected in the duplicate sample at this location.

3.3.1 SUPPLEMENTAL SUBSURFACE GAS INVESTIGATION

1. Site data collected by EPA under the Contingency Plan and by the WDIG in subsequent soil gas investigations identified elevated concentrations of soil gas COC, in excess of the interim threshold criteria, adjacent to some site buildings. In response to the decision criteria outlined in the Contingency Plan for exceedance of the interim threshold criteria, EPA determined that near-building soil gas monitoring was warranted for structures that bordered buried wastes. Based on the partial well network established by the WDIG, EPA determined



that ten building locations met the requirement for permanent monitoring points between the buried waste and the building. Locations of these wells (e.g., VW-54 through VW-63) are shown in Figure 3.8. The specific objectives of the vapor well installation effort were as follows:

- Complete the near-building permanent soil gas monitoring well network.
- Evaluate concentrations of COC in the vicinity of buildings that bordered buried wastes.
- Assess the potential for preferential gas migration pathways in the vicinity of buildings bordering buried wastes.
- 2. Four vapor well monitoring locations (VW-55, -57, -58 and -61) exceeded soil gas ITSL criteria for at least one COC. None of the other VOCs detected in the wells exceeded threshold levels. These wells have been sampled on a quarterly basis by WDIG for the COC as part of the routine quarterly soil gas monitoring plan.

3.4 GROUND WATER

- CDM Federal performed an evaluation to review and assess the WDI ground water monitoring and source characterization data to update the conceptual model for the Site and establish a framework for a future long-term ground water monitoring program (CDM, 1999d). The Site data and information reviewed included:
 - Ground water elevation and ground water sampling results from the 27 existing monitoring wells at the Site as shown in Figure 3.9.
 - Waste source characterization data from soil boring investigations and soil gas sampling.
 - Offsite and regional ground water information.
- 2. The following conclusions were based on the results and evaluation of ground water and waste source characterization and monitoring completed at WDI during the period October 1988 through April 1998 by CDM Federal:
 - 1997 water level monitoring indicates ground water occurs at depths ranging from 30 to 48 feet bgs (approximately 22 feet below the base elevation of the buried concrete reservoir). The upper water-bearing zone (estimated to be 100 feet or greater in thickness) consists primarily of interbedded and interconnected sandy alluvial deposits without laterally extensive confining beds. The overall direction of ground water flow is towards the south-southeast with a very low horizontal hydraulic gradient (average 0.004 foot/foot).



- The Site contains a variety of liquid and solid wastes, many of which are hazardous substances, including petroleum and petroleum-related chemicals, solvents, acetylene sludge, drilling muds, and construction debris (WDI wastes). WDI wastes occur both within and outside of the buried concrete reservoir that was originally used for petroleum storage. Outside the reservoir, WDI wastes were disposed in unlined excavated sumps and waste pits. Soil boring investigations have confirmed that the interval of buried sump wastes occurs over areas outside of the concrete reservoir (depths generally between 5 and 25 feet bgs).
- Primary contaminants at the Site which have the potential to cause ground water impact include the wastes buried within the concrete reservoir, the buried waste materials disposed outside the reservoir, and the soil gas. Hazardous constituents detected in WDI waste include benzene, toluene, ethylbenzene, and xylene (BTEX); solvents, primarily TCE, PCE, and associated degradation products (e.g., vinyl chloride); SVOCs; heavy metals (arsenic, chromium, copper, lead), and PCBs. Elevated levels of soil gas are present in the subsurface (vadose zone) outside of the reservoir in many areas of the Site. Soil gas hot spots are characterized by elevated levels of BTEX, methane, petroleum hydrocarbon vapor, and chlorinated VOCs.
- Primary VOCs detected in ground water samples are TCE and PCE, generally at concentrations less than 10 micrograms per liter (μg/L). During 1997-1998 sampling, PCE was detected at five monitoring wells at concentrations above its MCL of 5 μg/L (maximum 77 μg/L, well GW-11). TCE was detected in ground water above its MCL of 5 μg/L during 1998 sampling at one monitoring well (GW-11, 7.6 μg/L). PCE and TCE have been detected in the western part of the site in both upgradient and deep monitoring wells. Based on ground water flow conditions, the distribution of detections and information on offsite ground water contamination sites, the source of the PCE and TCE detected in the monitoring wells in the western portion of the Site appears to be from solvent releases associated with upgradient chemical or industrial sites.
- Toluene has been detected sporadically in ground water sampled at monitoring wells adjacent to and downgradient of WDI sources (maximum concentration 64 μg/L which is below the MCL for toluene). Toluene is considered a useful indicator chemical for ground water monitoring based on the solubility characteristics of this compound and the fact that it is also present in WDI buried waste and soil gas.
- There does not appear to be light nonaqueous phase liquid (LNAPL) or dense nonaqueous phase liquid (DNAPL) sources contributing to ground water contamination beneath the Site since high concentrations (i.e., greater than 1,000 μ g/L) of dissolved solvents or BTEX and evidence of oily sheen or floating hydrocarbons have not been observed in the ground water sampling conducted at the Site.



- Ground water sampling at the Site has not shown a consistent distribution or detection of the primary metals (arsenic, chromium, copper, lead), which are present at elevated concentrations in WDI wastes. Concentrations of these metals are generally very low and only isolated sampling rounds have exceeded the MCLs. Evidence of migration or impact to ground water from metals in WDI waste has not been observed in the ground water sampling data.
- Elevated concentrations of aluminum, iron, manganese, and selenium have been detected in ground water samples, in local cases, above primary or secondary drinking water standards. The fact that these metals are detected uniformly across the Site (locally at higher concentrations in upgradient wells) suggests that the elevated concentrations reflect a regional water quality condition and are not related to WDI onsite sources.
- 3. Significant impacts from WDI wastes on ground water quality have not been identified based on the available ground water sampling results and the comparison of sampling results with the location and characteristics of the waste sources at the Site. Several site COC (VOCs and metals) have been detected above their respective State drinking water MCLs in ground water samples. However, these exceedances do not appear to be related to site wastes based on their distribution in ground water (i.e., some contaminants are detected upgradient or laterally away from WDI waste sources).



4.0 1997 to 2001 WDIG RD INVESTIGATIVE ACTIVITIES

- 1. This chapter presents results of the various supplemental site investigative activities conducted by the WDIG, under the 1997 RD Investigative Activities Workplan, as ordered by the Amended Administrative Order, Docket No. 97-09. The supplemental site investigative activities reported herein are listed below:
 - Geoprobe and hollow-stem auger investigation of soil conditions.
 - Vapor well monitoring.
 - In-business air monitoring.
 - Ground water monitoring.
 - Reservoir liquids monitoring and extraction testing.
 - Reservoir trenching.
 - Stormwater monitoring.

The investigative results are presented by site media (i.e., soils and perched liquids, soil gas, in-business air and ground water). The information summarized below was compiled from the following reports:

- Technical Memorandum No. 7 Vapor Well Construction Details, November 1997.
- Technical Memoranda Nos. 6, 8 and 12 Reservoir Liquids Testing Report of Findings, October 1998.
- Technical Memorandum No. 9A Soil Vapor Extraction Testing, Report of Findings, March 1999.
- Technical Memorandum No. 10 Additional Soil Sampling and Leachability Testing Report of Findings, October 1998.
- Technical Memorandum No. 11 Reservoir Area Grading Plans and Waste/Debris Management As-Built Report, December 1998.
- Phase II Reservoir Interior Tests Trench Excavation, Report of Findings, October 1998.
- 1998 Annual Ground Water Monitoring Report, March 1999.
- 1998 Annual In-Business Air Monitoring Report, March 1999.
- 1998 Annual Soil Gas Monitoring Report, March 1999.
- 1999 Annual Ground Water Monitoring Report, June 2000.
- 1999 Annual Soil Gas Monitoring Report, June 2000.
- 1999 Annual In-Business Air Monitoring Report, July 2000.
- Technical Memorandum No. 13 Reservoir Liquids Removal Closeout Report, August 2000.
- Supplemental Subsurface Investigation, February 2001.

See Chapter 6.0 for a full bibliography.



4.1 SOILS AND PERCHED LIQUIDS

4.1.1 SOILS AND PERCHED LIQUIDS CHARACTERIZATION

- 1. A geoprobe investigation was completed at the Site by the WDIG in the fall of 1997, following the RD Investigative Activities Workplan, Appendix C Treatability Study (TRC, 1997a and various addenda). Objectives of this program for specific site areas included the following:
 - Area Inside of the Reservoir:
 - Determine chemical characteristics of the buried waste disposed in the reservoir, and the fill material overlying the waste.
 - Area Outside of the Reservoir:
 - Delineate the areal extent and thickness of buried waste below the existing surface of the fill soil. The buried waste generally has the appearance of low permeability drilling mud with evidence of petroleum hydrocarbons.
 - Determine chemical characteristics of:
 - Fill material above the buried waste.
 - Buried waste.
 - Native soil beneath the buried waste.
 - Analyze the chemistry of perched water observed at several areas with buried waste.
- 2. Figure 4.1 shows the location of the geoprobe borings installed to satisfy the above objectives. Probes TS-1 through -153 were selected to supplement: (1) prior data discussed in Chapter 2.0, and; (2) soil gas probe information collected by EPA in the summer of 1997 presented in Chapter 3.0. Probes TS-124 through -149 were installed at locations selected to collect representative samples for chemical analysis and geotechnical (primarily permeability) testing. Figure 4.1 also summarizes the soil chemistry and sump-like material thickness data. Table 4.1 summarizes the geotechnical results. Figure 4.2 summarizes the chemical analyses for the perched water samples extracted from two geoprobe locations (TS-137 and -142). Finally, Table 4.2 provides total petroleum hydrocarbon (TPH) data for the various materials encountered.
- 3. A Supplemental Subsurface Investigation (SSI) was performed at the Site by the WDIG during the second half of 2000 (TRC, 2001a). The objectives of the SSI were to provide critical site-specific data regarding the characteristics of the fill material, buried waste and native soils in Site Areas 1 and 8. This included the extent of buried waste near and beneath onsite structures, and the chemical and physical characteristics of the fill, buried waste and native soils.

- 4. Figure 4.1A shows the locations of the direct push and hollow-stem auger borings installed during the SSI. A total of 43 direct push borings were performed outside of buildings. A total of 20 direct push borings were performed inside of buildings in Areas 1 and 8. A total of eight hollow-stem auger borings were performed outside of buildings. The direct push borings were drilled to depths of approximately 20 feet bgs. The hollow-stem auger borings were drilled to depths ranging from approximately 35 to 40 feet bgs.
- 5. Select samples of the fill, buried waste and native soils were analyzed for:
 - VOC by Methods 5035 and 8260.
 - SVOC by Method 8270.
 - Metals by Methods 6010A, 7060, 7421, 7470 and 7740.
 - Pesticides and PCBs by Method 8081.
 - TRPH by Method 418.1.

Results of the analytical laboratory testing are presented in Tables 4.2A through 4.2F.

- 6. Select samples of the fill, buried waste and native soils were analyzed for geotechnical (i.e., physical) properties. The results of these tests are summarized in Table 4.2G.
- 7. Volume of waste material inside the central reservoir is calculated to be approximately 148,000 cubic yards (TRC, 1997a). The volume of buried waste outside the reservoir is calculated to be approximately 243,047 cubic yards, broken down by Site Area (see Figure 4.1) as follows:

APPROXIMATE VOLUME OF SUMP-LIKE MATERIAL BY AREA

SITE AREA	APPROXIMATE VOLUME OF SUMP-LIKE MATERIAL (cubic yards)	AVERAGE THICKNESS OF SUMP-LIKE MATERIAL (feet)
1	10,200	4
2	165,000	12
3	None	
4	23,000	12
5	10,500	10
6	47	1.5
7	8,600	12
8	25,700	6
TOTAL	243,047	

8. The chemical profile of the buried waste summarized in Figure 4.1 is shown in comparison with the ROD COC. The criteria used for most constituents is the cleanup criteria presented in the ROD. Exceptions include arsenic, beryllium and thallium, which are compared to their

industrial PRGs. This difference in criteria is used because data from the 1988 RI work showed that background levels for arsenic, beryllium and thallium indicated concentrations higher than the original ROD cleanup standards. Additional discussion on arsenic, beryllium and thallium is presented in the 1995 WDIG Predesign Report.

- 9. PCE and vinyl chloride concentrations are also presented in Figure 4.1. These constituents have been observed in some of the 1989, 1997, 1998 and 1999 soil gas vapor investigations. A complete data set for the COC was presented in Appendices A through G previously submitted on CD-ROM in April 1999. The 1998 soil gas analytical data is found in Appendix C. Appendix J contains an index to the CD-ROMs containing Appendices A through G.
- 10. Observations from soil chemistry data of the 1997 WDIG geoprobe investigation are the following (see Figure 4.1):
 - Area Inside the Reservoir:
 - Most constituents for the buried waste (deeper samples at TS-130, -134, -135 and -140) are below cleanup standards. Exceptions are one exceedance of arsenic at a 12-foot depth in TS-135 and single exceedances of chromium and PCE at the 12-foot depth in TS-130.
 - Constituents for the overlying fill material generally are less than the cleanup criteria. Concentrations of arsenic and chromium at a depth of 3.8 feet in TS-130 are slightly above (30 percent and 32 percent) the cleanup standards. The concentration of arsenic at a depth of 3.3 feet in TS-140 exceeds the cleanup criteria by approximately 10 percent.
 - Area Outside of the Reservoir:
 - Buried waste was observed throughout Area 2, along the inside perimeters of Areas 1 and 8 and within the interior perimeters of Areas 4, 5 and 7.
 - Thickness of buried waste is approximately 3- to 12-foot. Some thicker zones exist in Areas 4 and 5. The Area 4 data correlates well with boring data from the 1995 Predesign investigation discussed in Section 2.3.1.
 - Soil Chemistry Data Results:
 - Overlying Fill:
 - Concentrations of organic constituents are below PRGs.
 - Concentrations of metals are below PRGs, with the exception of:
 - One occurrence of arsenic and chromium at TS-132.
 - Occurrence of lead at TS-127, -129 and -132.

Buried Waste:

- Concentrations of organic constituents are below PRGs, with the exception of vinyl chloride at TS-130 and PCE, TCE and benzene at TS-130, -131 and -132.
- Concentrations of metals are generally below PRGs, with the exception of arsenic, chromium and lead at TS-132.
- Constituents appear relatively nonleachable.

Native Soils:

- Concentrations of metals and organics below PRGs for the native soil samples. The exception is one occurrence of arsenic at 20 percent above the PRG at a depth of 18 feet in TS-138.
- Chemistry of Perched Water Observations (see Figure 4.2):
 - Perched water was sampled and analyzed for VOCs at TS-137 and -141. Additional analyses were not performed due to a limited volume of sample collected. Analyses of the water from these locations do not show detectable concentrations of VOCs. A more comprehensive Treatability Study (TM No. 13) on perched reservoir liquids at the Site is discussed in Section 4.2.

11. Observations from the SSI are the following:

• The revised extent of buried waste based on the results of the SSI is shown in Figure 4.2A. As can be seen in Figure 4.2A the buried waste underlies a larger area than had been interpreted from previous explorations at the Site. The increases were found primarily on Parcels 28, 29, 32, 37 and 41. However, the depths at which buried waste was encountered were similar to those measured in previous explorations. Approximately 2,600 cy is estimated to be within the footprints of existing buildings.

• Fill Material:

- The fill material ranges from 1 to 14 feet in thickness in Areas 1 and 8. The fill material is comprised of sand to clay. Pieces of broken concrete, asphalt, bricks, wood and sawdust were also found within the fill material. The fill material was in a firm to stiff condition.
- TRPH concentrations in the fill material ranged from 7.0 mg/kg to a maximum of 14,000 mg/kg measured in sample DP-6-8.
- While some constituents were detected, they were all at concentrations below either the cleanup standards or the EPA PRGs.

Buried Waste:

The buried waste encountered during the SSI ranges in thickness from 1 foot to 14.5 feet and is located from 1 bgs to 14 feet bgs. The waste encountered was black to gray and comprised of a matrix of clay or sandy clay. The waste found in Parcels 32, 37, 41 and 42 was drier and denser than waste found in other areas. This could be indicative of reworking of the buried waste at the time of building construction.



- TRPH concentrations ranged from 9.1 mg/kg to a maximum of 3,700 mg/kg measured in sample IDP-5-6.
- While some constituents were detected, they were all at concentrations below either the cleanup standards or the PRGs with the exception of arsenic which was detected at a maximum concentration of 11 mg/kg (the cleanup standard for arsenic is 10 mg/kg).

Native Soil:

- Native soil was encountered from 2.5 feet bgs to 20 feet bgs. It is comprised of a red-brown clay and sandy clay and is underlain by brown silty sand and sand. These materials are typically in a stiff or dense condition and are moist.
- TRPH concentrations ranged from 5.1 mg/kg to 2,400 mg/kg with the maximum concentration measured in sample DP-20-20.
- While some constituents were detected, most were at concentrations below either the cleanup standards or the PRGs. Exceptions were:
 - One occurrence of toxaphene (3,900 μ g/kg) in sample IDP-2-20 (the PRG for industrial soil is 2,200 μ g/kg).
 - Six occurrences of arsenic (18 mg/kg in sample DP-4-6;
 14 mg/kg in sample DP-6-20;
 13 mg/kg in sample DP-13-20;
 12 mg/kg in sample DP-24-15;
 15 mg/kg in sample DP-31-20;
 and 31 mg/kg in sample IDP-2-20) over the cleanup standard of
 10 mg/kg.
 - Two occurrences of chromium (67 mg/kg in sample DP-4-6 and 63 mg/kg in sample IDP-2-20) over the cleanup standard of 44 mg/kg.
- 12. As indicated above, the fill material, buried waste and native soils are below hazardous waste criteria with a few exceptions. Several outliers of relatively low metals exceedances were observed, primarily in overlying fill soils. Toxicity Characteristics Leaching Procedures (TCLP) testing of selected soil samples is presented in Section 4.1.2.
- 13. Table 4.1 shows the fluid conductivities of the subsurface materials vary as follows:

	<u>Material</u>	Liquid Hydraulic Conductivity (cm/sec) ⁽¹⁾	Air Conductivity (cm/sec)(1)
•	Fill	10 ⁻⁷	10 ⁻⁶ to 10 ⁻⁹
•	Buried Waste	10 ⁻⁴ to 10 ⁻⁷	10 ⁻⁶ to 10 ⁻⁹
•	Native Soil	10 ⁻³ to 10 ⁻⁶	10 ⁻⁴ to 10 ⁻⁸

(1) Centimeters per second (cm/sec).

Important observations from these data are: (1) the low hydraulic; and (2) the low air conductivities of the buried waste and existing fill "cap" soils. These characteristics are similar to those frequently required for a low permeability cap and will greatly reduce the potential for significant infiltration water or gas migration to occur.

- 14. The geotechnical laboratory testing program performed during the SSI consisted of the following tests:
 - Moisture content and density determinations.
 - Grain-size analyses.
 - Unconfined compressive strength measurements.
 - Direct shear strength measurements.

These tests were performed on selected samples obtained from the hollow-stem borings. The results of the analyses are summarized in Table 4.1A.

15. In summary, buried waste is located over most of Areas 2, 4 and 5 and portions of Areas 1, 6, 7, and 8. This material ranges in thickness from very thin to approximately 18 feet. Chemical profiles for this material show conditions, which are below cleanup criteria. In addition, the material has a very low hydraulic conductivity that restricts migration of either infiltrating water or subsurface gases. The material appears to be relatively nonleachable and impermeable. Additional discussion of the leachability of these materials is presented below.

4.1.2 ADDITIONAL SOIL SAMPLING AND LEACHABILITY TESTING

- 1. A field investigation (TM No. 10 Additional Soil Sampling and Leachability Testing) (TRC, 1998d) was conducted to determine the potential leachability of Site COC, for use in evaluating the range of remedial alternatives options for areas outside the reservoir as part of the FS process. A limited number of samples (10 total) were collected from five locations at the Site. Samples of the fill and buried waste materials were collected from each location. Refer to Figure 4.3 for TM No. 10 testing locations.
- 2. The following activities were conducted according to the Scope of Work outlined in TM No. 10:
 - Collect and analyze fill and buried waste samples from five locations onsite, one inside the reservoir and four outside the reservoir.
 - Analyze the samples by TCLP and STLC methods.
 - Provide data to compare the characteristics of materials from inside and outside the reservoir.

4.1.2.1 Sampling Procedures and Chemical Analysis

- 1. Fill and buried waste samples were collected from the areas shown in Figure 4.3, using procedures outlined in TM No. 10.
- 2. Samples collected for total volatiles analysis (EPA Method 8260A) and TCLP testing were collected using an EMCOM sampler following EPA Method 5035. TCLP samples were extracted with acetic acid or with deionized (DI) water at the laboratory using EPA Method 1311 procedures. The DI water extract was run for a 48-hour period to simulate rain infiltration and analyzed using the methods listed below:
 - EPA Method 8260 (Volatile Organics).
 - EPA Method 8270 (Semivolatile Organics).
 - EPA Method 8081 (Pesticides and PCBs).
 - EPA Methods 6010A, 7060, 7421, 7470 and 7740 for metals.
- 3. In addition, a set of the samples were extracted using the California Analytical Method-Waste Extraction Test (CAM-WET) and analyzed for the constituents listed above with STLC values.

4.1.2.2 <u>Summary of Analytical Results</u>

- 1. Based on the total VOC data, the following conclusions can be made:
 - Fill Samples (WDI-LS-1 through -5):
 - VOCs would be below TCLP and MCL limits.
 - Waste Samples (WDI-LS-1 and -2):
 - VOCs would be below TCLP limits.
 - Waste Samples (WDI-LS-3, -4 and -5):
 - VOCs were below TCLP limits for constituents with the possible exception of vinyl chloride in sample WDI-LS-3. Sample WDI-LS-3 had a high detection limit (1 to 2 milligrams per kilogram [mg/kg]) for vinyl chloride; however, the result does not necessarily mean that vinyl chloride is present.
- 2. Table 4.3 provides a summary of the TCLP and STLC testing results. Based on the TCLP results, the samples did not have detectable levels that exceeded the regulatory limits.
- 3. The CAM-WET, also known as the STLC Test, is generally considered to be more aggressive than the Federal TCLP Test. STLC analysis focuses on metals, TCE and pesticides/PCBs. Table 4.3 provides a summary of the STLC data. As indicated in Table 4.3, one exceedance



of the STLC for lead was observed, in sample WDI-LS-4 (fill). The sample contained 5.07 mg/L lead compared to the STLC limit of 5.0 mg/L. This exceedance is not considered significant, since the average of the results is below the 5.0 mg/L standard.

- 4. To determine the potential for leaching of constituents because of rainwater infiltration, samples were also extracted using DI water for 48 hours, in comparison to the standard 18-hour TCLP extraction procedure. Results of this comparison indicated the following:
 - Use of DI water significantly reduces the amount of leachable constituents.
 - Exceedances of the TCLP criteria were not observed.
 - DI water-leached samples were below MCLs.

4.1.2.3 Findings

- 1. Based on the limited amount of data generated, it appears that the fill and buried waste are not considered hazardous by Federal TCLP or State STLC criteria. The only potential exception to this conclusion is vinyl chloride which had a significantly high detection limit in this testing episode that prohibited determination of the status of vinyl chloride. However, based on the other VOC levels, it is unlikely that vinyl chloride will exceed the TCLP limit. As discussed in Section 4.1.2.2, one minor STLC exceedance was observed for lead in Sample WDI-LS-4 (fill). This exceedance is not considered significant since the average soluble lead level was below the 5.0 mg/L criteria.
- 2. Due to some high detection limits observed during this test, a full evaluation of the potential leaching constituents above the MCLs for drinking water could not be completed. Elevated detection limits occurred as a result of the presence of oily hydrocarbons in the buried waste.
- 3. Evaluation of the deionized leaching results confirmed the potential for leaching under rain infiltration conditions is very low, and below the TCLP acid extraction levels. This indicates that it is unlikely that significant leaching has occurred in the past, which is supported by quarterly ground water data collected at the Site.
- 4. Based on the information presented above, the Site materials tested can be classified as nonhazardous for disposal purposes.

4.2 RESERVOIR LIQUIDS

4.2.1 INITIAL RESERVOIR LIQUIDS INVESTIGATION

- 1. Figure 4.4 shows the location of well VW-09, from which reservoir liquids samples were collected and analyzed in October 1997. The figure also summarizes the chemical profile of the sampled reservoir liquids.
- 2. In October 1997, VW-09 was sampled for liquids and evacuated to determine its recharge potential. Sampling of VW-09 liquids indicated the following constituents:
 - VOCs
 - Benzene, toluene, and vinyl chloride (e.g., 760 μ g/L, 1,400 μ g/L, 11.0 μ g/L, respectively).
 - SVOCs
 - Naphthalene and 2-methylnaphthalene (e.g., 690 μ g/L and 890 μ g/L).
 - PCBs (not shown in figure)
 - Low levels of PCBs were detected, e.g., <0.5 ppm.
 - Metals
 - Low levels of Arsenic, Barium, Cadmium, Chromium, Lead and Nickel were detected (e.g., 0.19 μ g/L, 0.41, 0.011, 0.025 and 0.094 μ g/L, respectively).

Monitoring of well recovery indicated the well recharged to within 80 percent of the original level within 24 hours. Additional liquids related activities were not conducted until the beginning of TM Nos. 6 and 8. The VW-09 data is included in Appendix K. Those activities are reported in Section 4.2.2.1.3 (TM Nos. 6 and 8 Findings).

4.2.2 ADDITIONAL RESERVOIR LIQUIDS INVESTIGATIONS

4.2.2.1 TM Nos. 6, 8 and 12 - Reservoir Liquids Testing

- 1. The purpose of TM Nos. 6, 8 and 12 activities was to assist in determining the hydraulic yield potential and chemical characterization of the liquids (free and aqueous phase) within the buried reservoir at the Site. Specific objectives for this investigation were as follows:
 - Estimate the hydraulic yield of the saturated portion of the reservoir and extraction well radius of influence.
 - Delineate chemical and physical characteristics of both free and aqueous phases of encountered reservoir liquids.
 - Characterize chemistry of soil gas from evacuated portion of saturated reservoir material, if possible.

- 2. Results of the initial TM No. 6 activities indicated the liquids extracted during the pump test were being yielded by the overlying fill soils and not the underlying, relatively impermeable waste material. As indicated in Section 4.1.1, fluid conductivity testing indicated the hydraulic conductivity in the fill is on the order of 10⁻⁷ (cm/sec). Although the conductivity appears low in comparison to the TM No. 6 results, it appears that the majority of the flow comes from between the fill and buried waste. To help verify this hypothesis, two additional pump tests were performed as indicated in the TM Nos. 6, 8 and 12 Report of Findings (TRC, 1998b).
- 3. Liquids recovery tests using reservoir piezometers were also performed under TM No. 12. The tests consisted of purging sixty-two 1-inch-diameter piezometers installed by EPA in July 1998, as discussed in Section 3.2.3, and monitoring the liquid recovery rates. Data collected during the TM No. 12 recovery testing was used for the following:
 - Characterize recharge rates of the reservoir liquids.
 - Determine if liquid levels return to initial static levels.

4.2.2.1.1 Field Activities

- This section summarizes the reservoir liquids investigations completed as outlined in TM Nos. 6, 8 and 12. This section also describes how these activities were implemented and discusses changes to the planned SOW that occurred because of encountered field conditions and observations.
- 2. The SOW for TM No. 6 activities included the following list of tasks:
 - Installation of six extraction wells and 16 monitoring probes.
 - Monitoring of liquids baseline conditions in the reservoir in the newly installed wells and probes.
 - Performance of a series of step and cycle-pump tests on the extraction wells.
 - Monitoring of free and aqueous phase recovery rates.
 - Sampling of free and aqueous phase liquids in the extraction wells and monitoring probes.
 - Sampling of soil gas in extraction well WDI-EX-2 (EX-2).
 - Liquids sampling at other wells located within the reservoir.
- 3. The installation of WDI-EX-1 (EX-1) and monitoring probes WDI-P-1, -2, -3 and -4 was completed on December 11 and 12, 1997. Refer to Figure 4.5 for the location of the extraction wells and monitoring probes. The wells and probes were constructed to the bottom

- of the reservoir, approximately 22 to 24 feet in depth, with screened intervals extending through the fill and buried waste. Figures 4.6 and 4.7 illustrate the subsurface conditions encountered during the well and probe installations.
- 4. The stratigraphy of the reservoir materials was found to be relatively consistent. A silty sand to sandy silt fill material of approximately 9 to 10 feet thick occurs over an approximately 15-foot-thick layer of black stained clays (drilling muds). Initial monitoring of liquid levels indicated that EX-1 was essentially dry, although the monitoring probes each contained liquids at a consistent elevation. Free product of varying thicknesses (0.4 to 7.25 feet) was detected at each monitoring probe.
- 5. Because of the conditions of EX-1 (i.e., dry well), an addendum to TM No. 6 was submitted. EX-2 was installed approximately 8 feet to the east of EX-1 and constructed similarly. Liquids were observed in EX-2 at approximately 4.5 feet bgs prior to initiating pump tests. Stepped pump tests were performed at EX-2 (0.5 gallons per minute [gpm] and 0.25 gpm).
- 6. EX-2 was dewatered to the pump inlet in 3 hours and 19 minutes during the 0.5 gpm pump test (see Figure 4.8 for liquid drawdown data). Approximately 93 gallons of liquids were purged from the extraction well during the test. Results from the 0.5 gpm test indicated a low yield from the reservoir material. Following consultation with EPA, a decision was made to reduce the pump rate to 0.25 gpm.
- 7. EX-2 dewatered in approximately 5 hours and 5 minutes during the 0.25 gpm pump test. Approximately 232 gallons of liquids were extracted during this test. At the completion of this time, and after a consultation with EPA, it was decided to complete a series of pump cycle tests over a 24-hour period to establish if a sustainable liquid extraction rate could be achieved. At full capacity the pump dewatered the wells in approximately 2 to 3 minutes. The recharge into the well ranged from 6 to 8 feet (see Figure 4.9 for liquid drawdown data). The pump was cycled on at approximately 2- to 4-hour intervals.
- 8. The approximate radius of influence and liquid drawdown conditions from pumping EX-2 are shown in Figures 4.10 and 4.11. Approximately 325 gallons were extracted from EX-2 during the pump tests performed by WDIG. ERTC extracted approximately 1,413 gallons from EX-2 during high volume testing performed June 25 through 29, 1998 (see Section 3.2.4). Following the completion of the pump test activities, liquid levels appeared to have recovered to essentially the prepumping levels.

- 9. Free and aqueous phase liquids were sampled and analyzed from EX-2 and monitoring probes prior to the 0.5 gpm pump test. EX-2, P-1 and VW-09 were also sampled at the conclusion of the 0.25 gpm pump test since these wells showed an influence (liquid level drop) during the test. Additional wells within the reservoir boundaries were also sampled for liquid characterization. Analytical results are summarized in Table 4.4.
- 10. A soil gas sample was collected from EX-2 on June 11, 1998, after the well was drawn down. Analytical results of the VOCs detected in the soil gas sample include vinyl chloride, benzene, TCE, toluene and xylene. These results are higher than previous vapor well monitoring results from within the reservoir area. This increase is believed to be due to pumping activity which can increase the volatilization of organics from liquids during drawdown and recovery.
- 11. Microbial analysis of the extraction liquids indicates the presence of aerobic and anaerobic bacteria in the samples, as shown in Table 4.5. In general, the microbial levels were relatively low (i.e., less than 1,000,000 organisms/L), with the exception of WDI-NDP-3 (EX-4 monitoring probe) which had 2,400,000 and 2,900,000, anaerobic and aerobic organisms/L, respectively. It was anticipated that the anaerobic bacteria levels would likely be in the range of 10 to 100 million organisms per liter given the anaerobic nature of the liquids. The lower than expected anaerobic bacterial levels are consistent with the observed low methane generation rates.
- 12. Samples of the oily liquids from the pump testing were also analyzed to determine the BTU and sulfur contents to evaluate the potential for these materials to be used as an alternative fuel material, or blended with a fuel source for use in an industrial type boiler or incineration. Oily materials with a BTU over 12,000 may have the potential for use in fuels or fuel blend. Sulfur contents greater than 1 percent generally reduce the feasibility of use as a fuel. As shown in Table 4.5, five of the well samples exceed the 12,000 BTU level and therefore could be considered for use in fuels. Sulfur concentrations of the samples appear below the 1 percent level, which could allow their use as a fuel if disposal is required. It must be considered that the oily portion of the liquids is a small amount of the overall liquids in the reservoir, and therefore use as an alternate fuel may not be practical.



13. Liquid levels were monitored in the reservoir from November 1997 to February 1998.

During this period, liquid levels rose significantly because of unprecedented rainfall caused by the global weather pattern known as "El Niño" (see Figure 4.12). The reason for the anomalous drop in water level at Well P-1, is not apparent.

4.2.2.1.2 Pump Testing at EX-4 and -6

- 1. Although it was initially hypothesized that the reservoir liquids were being extracted from overlying fill materials, it appears that the reservoir is behaving in a noncontinuous fashion. There appears to be higher permeability lenses which are filled with liquids, with little interconnection, and in varying directions. An addendum to TM No. 6, Addendum-TM No. 6 Additional Extraction Wells and Pump Tests, was implemented to verify the initial hypothesis. The scope of the additional field investigative activities included the following:
 - Installation of four liquid extraction wells (EX-3, -4, -5 and -6) at locations in the reservoir determined in conjunction with EPA's reservoir boring investigation results and 12 associated monitoring probes (see Figure 4.5).
 - Pump cycle tests were performed in the new extraction wells, with associated monitoring in the adjacent well(s) and probes.
 - Liquid samples were collected from the new wells for chemical characterization.
- 2. The installation of extraction wells EX-3 through -6 and monitoring probes (NSP-1, -2, -3; NDP-1, -2, -3; SSP-1, -2, -3; SDP-1, -2, -3) were similar to other TM No. 6 well constructions.
- 3. The stratigraphy of the reservoir materials was consistent with previous TM No. 6 activities (see Figures 4.13 to 4.16).
- 4. Liquid level measurements for each extraction well and monitoring probe were recorded prior to initiating the pump tests. Results showed similar levels as EX-2 and P-1 through -4 wells with the exception of the shallow extraction wells (EX-3 and -5), which were dry.
- 5. EX-4 was dewatered to the pump inlet level in approximately 10 minutes. The extraction well recovered to the pump level switch after 4.5 days. A complete series of two pump cycle tests were performed over an 18-day period to establish if a sustainable liquid extraction rate could be achieved. A total of approximately 42 gallons of liquids were extracted from EX-4 during this time. Refer to Figure 4.17 for EX-4 pump test recovery data.

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- 6. EX-6 also dewatered in approximately 10 minutes. A complete series of 10 pump cycle tests was performed over a 14-day period to establish if a sustainable liquid extraction rate could be achieved. A total of approximately 139 gallons of liquids were extracted during this test.

 Refer to Figure 4.18 for EX-6 pump test recovery data.
- 7. There did not appear to be a radius of influence during the pumping from EX-4 and -6, based on the lack of response in the associated piezometers, possibly because of a higher permeability lens bounded by a less permeable material.
- 8. A total of approximately 180 gallons were extracted from EX-4 and -6 during the pump tests and stored separately from EX-2 purged liquids. These liquids were sampled and handled similar to EX-2 purged liquids. Following the completion of the pump test activities, liquid levels appeared to have recovered to essentially the prepumping levels.

4.2.2.1.3 TM Nos. 6 and 8 Findings

- 1. The liquid measurements for the extraction wells (EX-1 through -6) and monitoring probes demonstrated a tremendous variability of the liquid content and permeability characteristics of the solid materials encountered within the reservoir.
- 2. The presence and thickness of the floating free product also varied in the wells. EX-2 did not encounter free product initially; however, a small quantity of product was induced into the well following repeated pumping. Well EX-4 did not encounter free product during the duration of the pump test activities. Some of the monitoring probes had measurable layers of floating product, ranging from 0.52 inches to 7.27 feet. Free product thickness also varied over time within individual probes, with product thickness ranges in some individual probes as high as 4.77 feet. Table 4.6 shows the liquid levels and the thickness of free product during TM No. 6 activities.
- 3. Results of the pump tests showed that the reservoir liquids have a relatively low hydraulic yield. The short-term cycle pump tests yielded the following:

PUMP TEST LOCATION	APPROXIMATE AVERAGE YIELD (gpm)	
EX-2	0.050	
EX-4	0.001	
EX-6	0.020	

Table 4.7 summarizes the hydraulic yields of the material for the pump tests at EX-2, -4 and -6.

4. Review of the drawdown data from the monitoring probes indicates that the radius of influence from well EX-2 ranges from less than 5 to approximately 20 feet. The following table summarizes the greatest drawdown measured in each probe.

Monitoring Well	Distance from EX-2	Direction from EX-2	Maximum Drawdown (ft)
P-1	5	North	0.85
VW-09	15	South	3.5
P-2	23	East	
P-3	26	West	
P-4	45	East	0.41

Although P-4 was observed to have an influence of drawdown at 45 feet away from EX-2, P-2 is located directly between the two wells (see Figure 4.5 for the location of the well extraction and probes). Discontinuity in the influence sphere is possibly the result of the orientation of higher permeability zones or lenses. However, during ERTC/REAC liquids investigations at EX-2, a limited drawdown in liquid levels was observed at P-2 and -3.

- 5. Review of the drawdown data from the monitoring probes during EX-4 and -6 pump test did not appear to show an influence directly related to pumping. However, there did appear to be minor fluctuations in elevations ranging from 0.1 to 0.3 feet. These fluctuations may be part of naturally occurring phenomena (i.e., possibly influenced by changes in barometric pressure) which have been observed throughout TM No. 6 activities.
- 6. Results of the chemical analyses of the liquids generally indicate conditions that would be expected given the known history of waste deposition at the Site. The analyses confirm that the buried waste is primarily drilling muds containing petroleum hydrocarbons, although some other materials may have been disposed at the Site. Analysis of the reservoir liquids indicates they are not considered a hazardous waste. However, one well, P-3, showed high PCB levels when sampled by EPA. Subsequent samples were collected by WDIG, and the PCB levels were below the nonhazardous criteria. Tables 4.8, 4.8A and 4.9 summarize the chemical characteristics of the liquids encountered.
- 7. Soil gas sampling of EX-2 indicated elevated levels of vinyl chloride, cis-1,2-dichloroethene, benzene, toluene and total xylenes at concentrations of 34, 15, 11, 15 and 7.9 ppm, respectively. The gases may be from the surrounding soil column since the well was screened

from 5 to 22 feet. Some of the VOCs may have volatilized from the liquids (LNAPL) and therefore are not expected to be representative of the true soil gas conditions in the reservoir.

4.2.2.2 TM No. 12 Activities

- 1. Liquid recovery testing of the piezometers was initiated on October 1, 1998. Prior to purging, liquid levels were monitored using a water/oil interface probe (see Table 4.10 for monitoring results). Purging activities were conducted by using a peristaltic pump and placing tygon tubing to the bottom of the piezometer. The piezometers were purged at a rate of approximately 0.15 gpm until the piezometer was dewatered or a minimum of one well volume (approximately 1 gallon) was purged. Liquid levels were monitored initially, 1 hour and 24 hours after purging.
- 2. Observations made during TM No. 12 activities also show the tremendous variability of the liquids and material characteristics encountered within the reservoir boundary. This is supported by the drawdown depths, recovery rates and levels recorded during field activities.
- 3. Prior to purging, the presence and thickness of the floating free product varied in the wells ranging from a sheen on the surface to approximately 5.25 feet thick.
- 4. Drawdown levels measured immediately after pumping activities have shown an influence ranging from no drawdown to purging the piezometer dry (see Table 4.10 for liquid levels).
- 5. Recovery of the liquids were monitored initially, 1 hour and 24 hours following purging activities. In some of the piezometers, liquid levels recovered back to and even greater than the original level (i.e., prior to purging). In others, parameters did not recover back to original levels. The following is a summary of the results:

NO. OF PIEZOMETERS	FINAL LIQUID LEVEL CONDITION
4	> Prepurge Level
28	< Prepurge Level
30	= Prepurge Level

Table 4.10 summarizes the liquid levels monitored during field activities.

6. Approximately 65 gallons of liquids were purged during the field activities. The purged liquids were discharged into two 55-gallon drums. Disposal of these liquids was handled during TM No. 11 - Reservoir Grading and Waste/Debris Management activities.

7. At the completion of the recovery monitoring, the piezometers were abandoned by pulling the PVC out of the ground, cutting off the top 4 feet, pushing the PVC back into the ground and then pressure grouting the casing.

4.2.2.2.1 TM No. 6, 8 and 12 Conclusions

- 1. To further investigate the reservoir liquids and materials characteristics, WDIG performed several pump test activities within the reservoir boundary. WDIG's findings indicate that there is a tremendous variability in the liquids and materials characteristics within the reservoir. This is also demonstrated by the data collected during EPA and WDIG trenching activities (see Section 3.2).
- 2. Observations and analytical data collected during trenching and TM Nos. 6, 8 and 12 activities showed the following characteristics of the materials encountered within the reservoir:
 - Reservoir liquids appear to consist of infiltrated rainwater and light crude oil, based on the observed characteristics and the analytical data.
 - Fill material consists of a heterogeneous silty sand to sandy silt layer intermixed with wood and concrete debris.
 - Buried waste consists of black stained clays (drilling muds) with zones of liquid and/or free product.
 - Hydraulic characteristics of liquids within reservoir boundary are heterogeneous. Areas of higher permeability lenses which contain liquids were observed in both the fill and buried waste.
 - Chemical characteristics indicate that the liquids are a nonhazardous material.
- 3. Observations made during the TM Nos. 6 and 12 activities support the hypothesis that liquids within the fill and buried waste are contained within higher permeability lenses. These pockets are not interconnected and locations are not well defined throughout the reservoir.
- 4. Twenty-two wells were installed by WDIG to demonstrate if the liquids in the reservoir could be effectively extracted by pumping activities. Data generated from these wells indicated the following:
 - Three of the six extraction wells were dry (EX-1, -3 and -5). This is possibly because of the undefined areas of higher permeable lenses.
 - Liquid levels appear to be related to the diameter of the wells (see Figure 4.19 for liquid level differences). The levels are influenced



- by: (1) low permeability of the fill and waste material; (2) limited volume of liquids; and (3) differences in void space determined by the diameter of the boring.
- Sustainable short-term yields ranged from 0.001 to 0.050 gpm. The
 yields would be expected to decrease over time because of the limited zone
 of influence and volume of free-liquids contained in the higher
 permeability lenses.
- Limited radius of influence ranging from less than 5 feet to approximately 20 feet during WDIG activities. However, during ERTC's vacuum enhanced testing, an influence was observed less than 20 feet from the extraction well.

4.2.2.3 TM No. 13 Activities

- 1. TM No. 13 was a liquids removal treatability study that was implemented by the WDIG as a 1-year study (TRC, 2000). The treatability study was designed with the following objectives:
 - Determine the feasibility of reservoir liquids extraction on a large scale based on in-situ characteristics of the materials within the reservoir boundary.
 - Determine if extracting reservoir liquids is cost-effective.
 - Reduce free liquids in the reservoir.
 - Collect additional data to supplement TM Nos. 6, 8, and 12 activities and findings.
- 2. The EPA approved the extraction well locations on January 22, 1999. The locations for ten new extraction wells were selected based on findings of previous reservoir investigations. Eight existing wells installed as part of previous reservoir investigations were also used for this treatability study. Figure 4.19A shows the well locations.
- 3. Liquids were extracted from the wells using pneumatic pumps attached to an air compressor capable of providing approximately 10 standard cubic feet per minute (scfm) of free air at 100 pounds per square inch (psi) of pressure to each of the 18 wells. The volume of liquids extracted from each well was measured via an inline meter (i.e., totalizer or pump cycle counter).
- 4. The purged liquids were transferred via 1-inch diameter polyvinyl chloride (PVC) piping within a 3-inch diameter PVC pipe to provide double-wall protection from the wells to a main line, which led to the bermed liquids treatment and storage unit area. The liquids were sent through an oil/water separator, the water phase was transferred to a sump and pumped through a carbon absorption drum to remove trace organic constituents. After treatment, the

water was stored in a 20,000-gallon Baker tank. Prior to disposal, water samples were collected and analyzed to confirm if the samples met the acceptance criteria of the disposal facility.

- 5. The recovered oil was transferred to a separate Baker tank. The 800 gallons of oil collected during the treatability study was disposed offsite at the completion of the study. Prior to disposal, a sample of the recovered oil was collected and analyzed to confirm that the sample met acceptance criteria of the disposal facility.
- 6. The system, activated on May 26, 1999, was shut down on June 2, 2000. Approximately 130,150 gallons of liquids (800 gallons of oil and 129,350 gallons of water) were extracted from the reservoir.
- 7. Routine monitoring during system operation was performed to evaluate the feasibility of liquids extraction. The following system parameters were monitored as part of the study field activities.
 - Individual well pumping rates.
 - Total volume of liquids removed from each extraction well.
 - Total volume of liquids removed from the reservoir.
 - Sustainability of yield over time.
 - Liquid level recovery rates.
 - Liquid levels in nonpumped wells (initiated in September 1999).
 - Chemical properties of the reservoir liquids.

Figures 4.19B and 4.19C summarize the system data collected from May 26, 1999 through June 2, 2000. Initially, the system was monitored daily to check equipment and to record totalizer readings from the individual wells and Baker tanks. After the first 18 days of operation, monitoring of the system generally occurred every 3 to 5 days. Liquid levels in the pumped and nonpumped wells were measured eight times to determine recovery rates after a system shutdown and to evaluate the potential zone of influence (see Figure 4.19D).

- 8. In addition to monitoring the physical characteristics of reservoir liquids, several sampling events occurred as part of the study activities for operational and disposal purposes. The following locations were sampled:
 - Extraction wells (prior to system start-up and on June 10, 1999).
 - Treatment system during start-up.
 - Stored effluent and recovered oil (disposal purposes only).

Samples were collected from sample ports located at each of the locations noted above. If discrete samples were required (i.e., oil and water) disposable PVC bailers were used. Results of analytical tests performed on liquids from the extraction wells are summarized in Table 4.10A.

- 9. The extraction rate declined steadily with the exception of several short-term peaks that were caused by shutting down the system for 1 to 2 weeks to monitor liquids level recovery and/or to perform routine maintenance. There was a continued decrease in the liquid recovery rates and extraction rates from the start of system operation. For example, the extraction rate for RW-10, the largest producer of liquids, decreased from 38 gallon/hour on June 1, 1999 to approximately 6 gallons/day on May 19, 2000.
- 10. As indicated in Figure 4.19C, RW-10 and PB-6 were the highest producers of reservoir liquids (RW-10: 43,643 gallons and PB-6: 24,118 gallons). These results indicated that the largest producing wells are located in the eastern portion of the reservoir, and the rate of extraction decreases significantly towards the west.
- 11. Figure 4.19D provides a summary of the liquid level recovery data. The system was shut down on a regular basis to monitor the liquids recovered in all of the extraction wells. The top five producing wells (RW-10, PB-6, RW-6, RW-7, and RW-8) generally showed a decrease in the liquid level recovery over time. The middle producing wells (TT-II-I, TT-II-2, PB-8, PB-2, and RW-9) showed erratic recovery levels. The low producing wells (EX-2, RW-3, RW-2, EX-4, RW-4, RW-5, PB-4, EX-1, EX-6, SDP-1, SDP-2, SDP-3, P-1, P-2, P-3, and P-4) also showed erratic recovery levels.
- 12. The distinctly spatial distribution of liquids yield within the reservoir suggests a dominant physical characteristic controlling liquid flow to collection points (i.e., monitoring/extraction wells). The characteristics of the reservoir, in terms of liquids yield were determined using two primary investigation techniques.
 - Soil borings completed into the reservoir subsurface:
 - SB-series borings (EBASCO, 1988)
 - TB-series geoprobes (TRC, 1997).
 - EX-, P-, SP-, and NP-wells and probes (TRC, 1997 and 1998).
 - TT-wells (TRC, 1998).
 - RW-series extraction wells (TRC, 1999)
 - Liquid pump tests and extraction treatability study:
 - TM No. 6 Liquid Pump Test (TRC, 1997 and 1998).
 - TM No. 13 Pilot-Scale Treatability Study for Reservoir Liquids Removal (TRC, 2000)

- 13. The interface surface created between the drilling muds and fill material would tend to retard infiltrating liquids. Since the interface surface is sloping, wells located at relatively low points would tend to have the largest liquids yield. This gradient-controlled flow is probably the primary component of liquid conductivity in the reservoir.
- 14. An examination of the data indicates a strong correlation between elevation of the fill/waste material interface surface and total liquids extraction. The interface surface is relatively flat in the northwest portion of the reservoir. Liquids extraction was very low in this area, ranging from 0 to 611 gallons pumped over 12 months of system operation. The central portion of the reservoir shows a range from relatively gentle surface gradients to moderately steep. In this area, yield of the extraction wells ranged from 512 to 7,700 gallons. Steep dipping areas are observed in the eastern and southwestern portion of the reservoir. RW-10 and PB-6, located in the eastern portion, produced total volumes of 42,643 and 24,118 gallons, respectively. Extraction Well RW-6, located in the southwestern portion, produced approximately 18,954 gallons.
- 15. A minor component of liquids conductivity is the slow weeping flow of liquids contained in the waste material. The flow magnitude from this component is probably on the order of the yield experienced by wells in the northeast portion of the reservoir, which exhibited average extraction rates of 0 to 4 gallons per day (0 to 0.015 gallons per hour). Wells in the northeast portion of the reservoir exhibited average extraction rates of 8 to 245 gallons per day (0.35 to 10.2 gallons per hour).

4.2.3 PHASE II RESERVOIR INTERIOR TEST TRENCH EXCAVATION

4.2.3.1 Introduction

- 1. The purpose of these activities was to assist in determining the location of liquids (free and aqueous phase) within the reservoir at the Site. The specific objectives for these activities were as follows:
 - Observe the liquid conditions in the fill and buried waste.
 - Measure the release rates of the liquids encountered in the test trench.
 - Measure the change in liquid levels and quantities over time.
 - Observe the physical behavior of the buried waste.
 - Measure the production values for the trench work.
- 2. The following activities were conducted according to the SOW:
 - Excavation of three test trenches.
 - Installation of piezometers in two of the three test trenches.



Rev. 2.0, 5/4/01 4-22

- Paint filter tests performed on subsurface samples collected during trenching.
- Monitoring liquid levels in riser pipes.

4.2.3.2 Field Activities

- This section summarizes the test trenching activities completed during September 1998. This
 section describes how these activities were implemented and discusses changes to the planned
 SOW that occurred due to field conditions and observations (TRC, 1998c). Appendix L
 contains the Phase II Reservoir Test Trenching Report of Findings.
- 2. The SOW completed during trenching activities included the following sequence of events:
 - Excavated Test Trench II-1 in the central portion of the reservoir and installed one piezometer (TTII-1).
 - Excavated Test Trench II-2 in the northern portion (12:00 o'clock position) of the reservoir and installed one piezometer (TTII-2).
 - Excavated Test Trench II-3 in the southern portion (6:00 o'clock position) of the reservoir.
 - Monitored liquid levels in the piezometers.
- 3. As tasks described in the Phase II Workplan were executed, some of the specifics were modified, with EPA concurrence, to suit field observations and conditions. The following paragraphs discuss each of the activities performed and field changes made.
- 4. Excavation of three test trenches (Test Trench II-1, -2 and -3) was performed within the boundaries of the buried reservoir. The locations of the trenches are shown in Figure 4.20. Figures 4.21 through 4.23 illustrate the subsurface conditions encountered during the trenching activities and the construction details of the piezometers installed.
- 5. Test Trench II-1 was excavated near existing reservoir liquids extraction wells and monitoring probes (i.e., EX-2, VW-09 and P-2) installed during TM No. 6 activities. This location was selected based on previous observations made during TM No. 6 field activities. This location was also selected because it could be assumed that most liquids would tend to migrate toward the central position of the reservoir. The trench was excavated using a track-mounted excavator to approximately 20 feet in length, 4 feet in width and 20 feet in depth.
- 6. Cuttings generated from Test Trench II-1 were separated into two separate stockpiles (fill and buried waste) adjacent to the trench. The buried waste was stockpiled on a plastic liner and sprayed with a vapor suppressant, BioSolveTM, to help control vapors emanating from the

trench and cuttings. The total depth of the trench extended to the bottom of the reservoir (approximately 20 feet). However, due to the characteristics of the buried waste (soft, low shear strength), the trench walls collapsed to approximately 15 feet from the surface. Piezometer PII-1A was then installed at a total depth of 15 feet in the central portion of the trench to monitor the liquids zone encountered at 9.5 feet bgs (see Figure 4.21). The pipe was screened from 10 to 15 feet and a gravel filter pack was placed to 9 feet bgs. The remaining portion of the trench was backfilled with the cuttings with 2 feet of clean fill overlying the waste material.

- 7. Test Trench II-2 was located within the northern portion of the reservoir boundary, at approximately the same location as EPA's Trench-2. The location of Test Trench II-2 was chosen based on previous information observed during EPA's trenching (i.e., liquids encountered at approximately 9.5 feet bgs) and TM No. 6 piezometer data. The trench was excavated using the same procedures as described for Test Trench II-1. The trench dimensions were approximately 22 feet in length, 8 feet in width and 15 feet in depth (see Figure 4.22). Similar conditions were encountered with the fill and buried waste as Test Trench II-1 (i.e., characteristics of the material and the caving of the trench walls). Piezometer PII-2A was installed at a depth of 11.5 feet with 5 feet of screen.
- 8. The volume of gravel used to construct the piezometer in Test Trench II-2 displaced the volume of buried waste generated from trenching, thus resulting in the buried waste being backfilled to the surface. Under the supervision of EPA, approximately 20 cubic yards of the buried waste was reexcavated and placed into a lined roll-off bin. The trench was then backfilled with 3 feet of fill above the buried waste. Cuttings in the roll-off bin were disposed during TM No. 11 Reservoir Grading and Waste/Debris Management field activities.
- 9. Test Trench II-3 was located at the southern portion of the reservoir boundary. This location was agreed upon by EPA and WDIG. The original proposed location was between the 1:00 and 2:00 o'clock positions on the reservoir where liquids were encountered during EPA's trenching activities. However, due to time constraints and lack of data in the southern portion, this location was selected. Test Trench II-3 was excavated to 30 feet in length, 4 feet in width and 20 feet in depth (see Figure 4.23). Caving of the buried waste from the trench walls also occurred which prevented the trench from remaining open to the bottom of the reservoir. A piezometer was not constructed in this trench since the liquids characteristics were not similar (i.e., volume of liquids observed) to Test Trenches II-1 and -2.

10. Grab samples of each subsurface layer encountered were collected using the excavator bucket in each trench. Paint filter tests were then performed on these samples following EPA Method 9095.

4.2.3.3 Findings

- 1. The stratigraphy of the reservoir materials was relatively consistent in the three test trenches. A silty sand to sandy silt fill soil layer of approximately 8 to 10 feet thick lies over an approximately 15-foot-thick layer of black stained clays that comprise the buried waste. Test Trenches II-1 and -2 had an increase in the size and content of debris (i.e., broken concrete) compared to other investigative areas within the reservoir during Phase I and II field activities. The top 8 feet of fill material was dry and compacted in the three test trenches. Liquids were observed in Test Trenches II-1 and -2 at the transition zone of the fill and waste material (approximately 9.5 feet bgs). The findings in Test Trench II-2 were consistent with EPA Phase I-Trenching. Test Trench II-3 did not encounter similar liquid conditions. The volume of liquids observed in Test Trench II-3 was minimal and did not appear to warrant the construction of a piezometer.
- 2. Liquids encountered in Test Trenches II-1 and -2 flowed into the trenches at a constant rate of approximately less than 0.5 gpm for a limited period. The liquids appeared to be flowing from a perched zone located in the fill and buried waste transition zone. Small seeps also appeared on the walls of the trench in the buried waste, but were not generating a significant volume of liquid (i.e., pooling of liquids was not observed in the trenches).
- 3. Liquid level data collected for a pump test from nearby wells show a slight decrease in elevation (approximately 0.4 inches) following trenching activities at Test Trench II-2. This decrease in elevation may have been influenced by the trenching activities.
- 4. The presence and thickness of free product also varied in the trenches compared to existing monitoring wells. Floating free product was not encountered in the trenches. However, a sheen was observed on the water flowing into the trenches. Data collected from reservoir liquids extraction wells and monitoring probes, located approximately 5 to 10 feet from the trench, indicated a layer of floating product, ranging from 0.2 inches to 1.7 feet.
- 5. Liquid levels were monitored in piezometers TTII-1A and -2A, as well as existing nearby monitoring wells, and are shown in Table 4.11. The liquids measured in existing monitoring

wells, located within 10 feet of the two trenches (i.e., EX-2, P-1, VW-09, DNP-1 and SNP-1), have liquid levels inconsistent with the levels observed in the trenches. The difference in liquid levels between the wells and the trenches is approximately 7 feet, while the largest difference between the wells is approximately 5 feet.

- 6. Paint filter test results from the three test trenches indicate that there were no "free liquids," as defined in Title 22 of CCR, in the fill or waste material. Table 4.12 presents the results for the paint filter test.
- 7. The following observations were made with respect to the composition and characteristics of the fill and waste material during excavation:
 - Fill material was compacted, and contained large pieces of debris (i.e., broken concrete) which made trenching difficult.
 - Volume of material excavated from the trench increased as the debris was removed. The walls of the trench would begin to collapse making the work area unsafe.
 - Buried waste was soft and saturated causing the walls of the trench to collapse. This also increased the volume of material excavated and slowed production of the trench.
- 8. Test Trenches II-1 and -3 were trenched to the bottom of the reservoir (~20 feet bgs). However, due to the conditions noted above (i.e., caving of trench walls), the trench (depths greater than 15 feet bgs) did not remain open for a long period of time. It is important to note that liquids did not pool in the trench at depths greater than 15 feet, including the trench completed to the bottom of the reservoir.
- 9. WDIG's findings indicated the following:
 - Tremendous variability in the liquids characteristics within the reservoir.
 - Fill material consisted of a silty sand to sandy silt layer intermixed with wood and concrete debris.
 - Buried waste consisted of black stained clays.
 - Hydraulic characteristics of liquids within reservoir boundary were heterogeneous.

4.3 SOIL GAS

4.3.1 ANNUAL SOIL GAS MONITORING RESULTS

4.3.1.1 Introduction and Purpose

- 1. Annual Soil Gas Monitoring Reports were submitted to EPA in March 1999 and May 2001 to provide summaries and evaluations of the soil gas data collected by the WDIG from February 1998 through October 1998 and February 1999 through October 1999, respectively, at the Site (TRC, 1999a and TRC, 2001b).
- 2. The current vapor well network is composed of the following well groups:
 - VW-01 through -26 installed by EPA in 1988 as part of the RI (EBASCO, 1989d).
 - VW-27 through -55 installed by WDIG in 1997 as part of TM No. 7, under the RD Investigation Alternative Workplan (TRC, 1998e).
 - VW-56 through -63 installed by EPA in 1998 as part of the Subsurface Gas Contingency Plan (EPA, 1997c).
- 3. The purpose of the annual reports is to review the soil gas conditions observed and to evaluate potential offsite gas migration from WDI sources. The reports were prepared with the following objectives:
 - Provide a summary of the soil gas data collected by WDIG.
 - Evaluate the data as to trends or other observations.
 - Evaluate the potential migration of soil gas contaminants into onsite buildings.
 - Provide a formal transmittal to the laboratory data and Quality Assurance/Quality Control (QA/QC) to the EPA.
 - Update the Soil Gas Monitoring program, based on the findings of the current soil gas conditions.

4.3.1.2 <u>Summary of Prior Soil Gas Investigations</u>

1. The WDIG and EPA conducted soil gas investigative activities during 1997 and 1998, under WDIG's 1997 RD Investigative Activities Workplan (TRC, 1997a) and EPA's 1997 Subsurface Gas Contingency Plan (EPA, 1997c). These activities included geoprobe soil gas screening, two soil gas monitoring rounds, in-business air monitoring, the addition of 22 vapor wells installed by WDIG, and the completion of four soil gas monitoring rounds performed by WDIG. Figure 3.8 shows the complete vapor well monitoring network by area.

- 2. The following criteria were the primary objectives for performing the soil gas characterization activities:
 - Determine current soil gas conditions in the following areas:
 - Perimeter of the Site.
 - Adjacent to onsite structures.
 - Interior of the Site.
 - Determine trends in the historical data.
 - Evaluate if other compounds that have currently not been assigned site-specific action levels may pose a risk.
- 3. Interim Action Levels (IALs) for benzene and vinyl chloride were established as part of EPA's Subsurface Gas Contingency Plan and the Amended Administration Order, Docket 97-09, based on the potential migration of subsurface gas into onsite businesses. A more detailed description of the rationale for these IALs is provided in EPA's Subsurface Gas Contingency Plan and the Amended Administrative Order (see Chapter 1.0).
- 4. To address the risks from methane, EPA used the California Integrated Waste Management Board's (IWMB's) methane action level in buildings as their criteria. The IWMB's criteria is as follows:
 - Methane levels in buildings will be below 1.25 percent (i.e., 25 percent of the methane lower explosion limit of 5 percent).
 - Subsurface methane levels at the Site boundary must be below 5 percent based on California IWMB requirements. An ITSL of 1.25 percent was used by EPA in evaluating the results of the Subsurface Gas Contingency Plan Investigations Report.

4.3.1.3 Additional Soil Gas Activities

1. In July 1998, EPA installed an additional 10 nested vapor wells (VW-54 through -63). The nested wells were installed at the locations shown in Figure 3.8, as discussed in Section 3.3.

4.3.1.4 Soil Vapor Monitoring Results

1. Tables 4.13 through 4.16 summarize the analytical results for each sampling event conducted during 1998 for COC with ITSLs. Table 4.16A shows 1999 summary of trend data for selected soil gas wells and selected constituents. Figures 4.24 through 4.28 present the 1998 methane, benzene and vinyl chloride data by areas. Figures 4.28A through 4.28E present the 1999 methane, benzene, and vinyl chloride data by area.



4.3.1.5 Conclusions

1. Conclusions for the Subsurface Gas Monitoring program are summarized below by site area.

4.3.1.5.1 Area 1

- 1. In Area 1, the vapor well results indicate the following conditions:
 - Perimeter wells: The perimeter wells in Area 1 are below the California IWMB 5.0 percent methane standard. VW-35 (deep well), near Los Nietos Road, has shown elevated TCE levels above the ITSL throughout 1998 and 1999.
 - Onsite structures: VW-18 located near the southeast corner of the Site between two buildings has shown elevated benzene levels above the ITSL throughout 1998 and during the first and third quarters in 1999. VW-44 (deep well), adjacent to Buffalo Bullet, showed elevated vinyl chloride levels during the first three quarters of 1998 monitoring, but dropped below the ITSL in the October 1998 sampling event. Elevated levels of vinyl chloride were not detected during the 1999 monitoring episodes. In-business monitoring of buildings in this area has not shown evidence of soil gas infiltration.
 - Data trends: Table 4.18B shows the critical wells for 1998 and 1999.
 - Other compounds: VW-10 exceeded the ITSL for vinyl chloride during the first three quarters of monitoring, but decreased to below the ITSL during the October 1998 sampling event. Elevated levels of vinyl chloride were not detected during the 1999 monitoring episodes.

Tables 4.17 and 4.18 provide a summary of the ITSL exceedances in Area 1.

2. Based on the data collected during the ten quarters, the soil gas levels in Area 1 appear to be relatively stable, or in some cases decreasing slightly.

4.3.1.5.2 Area 2

- 1. Vapor wells in Area 2 have shown the following conditions:
 - Perimeter wells: The perimeter wells on the north portion of Area 2 are below the California IWMB criteria and ITSLs.
 - Onsite structures: There is one onsite structure partially located in Area 2. In-business air monitoring of the building has not shown evidence of soil gas infiltration.
 - Data trends: Table 4.18C shows the critical wells for 1998 and 1999.
- 2. Two wells, VW-45 and -48, have shown elevated methane, benzene and vinyl chloride levels in the shallow, intermediate and deep wells throughout 1998 and 1999. These wells are

adjacent to the reservoir and may be located in impacted areas (i.e., buried waste). Well VW-43, both intermediate and deep wells, have shown elevated levels of methane and vinyl chloride throughout 1998 and through the third quarter of 1999 near the eastern edge of Area 2.

- 3. RI vapor wells, VW-02 and -03, have shown elevated methane levels above the ITSLs but below the California IWMB standards in 1998. Elevated methane levels were not detected in 1999. Well VW-04, located in the reservoir area, has shown elevated methane levels above 15 percent, and elevated vinyl chloride and benzene levels above the ITSLs throughout 1998 and through the third quarter of 1999.
- 4. Soil gas levels in Area 2 are generally higher than the remainder of the Site because of the elevated methane and VOC levels in the reservoir. Soil gas levels appear to be relatively stable in Area 2.
- 5. Tables 4.17, 4.17A, and 4.18A provide a summary of the ITSL exceedances in Area 2.

4.3.1.5.3 Areas 3, 4 and 5

- 1. Vapor well monitoring in Areas 3, 4 and 5 has indicated the following conditions:
 - Perimeter wells: The perimeter wells in Areas 3, 4 and 5 are below the California IWMB standards.
 - Onsite structures: Well VW-51 (intermediate and deep wells), located near the Brothers facility, has shown elevated methane, benzene and vinyl chloride levels throughout 1998 and 1999 as discussed below. Inbusiness monitoring of the Brothers building has not shown evidence of soil gas infiltration.
 - Data trends: Critical wells are not found in Area 3. Table 4.18D shows the critical wells in Areas 4, 5, and 7. Area 7 will be discussed in Section 4.3.1.5.4.
- 2. Well VW-51, located near the Brothers facility, has shown elevated methane levels exceeding the 5 percent level in both the intermediate and the deep zones. Well VW-51-18 (intermediate well) has shown levels of 32.8 percent methane and benzene levels of 6,500 ppb during the October 1998 monitoring. Well VW-51-30 (deep well) during this same period has shown methane, benzene and vinyl chloride levels of 32 percent, 36 ppb and 16 ppb, respectively. Based on these results, additional monitoring of VW-51 is required. The trends shown in Well VW-51 continued throughout 1999.

- 3. Area 5 was included in a recent Soil Vapor Extraction (SVE) Treatability Study. The October 1998 monitoring was conducted after completion of the SVE Treatability Study. Soil gas levels in VW-51 have appeared to increase after the study. This phenomenon may require additional evaluation.
- 4. There has not been ITSL exceedances in Area 3. Table 4.17 provides a summary of the ITSL exceedances in Area 4. Tables 4.18 and 4.18A provide a summary of the ITSL exceedances in Area 5.

4.3.1.5.4 Areas 6 and 7

- 1. Vapor well monitoring of Areas 6 and 7 has shown the following conditions:
 - Perimeter wells: The perimeter wells in Areas 6 and 7 are below the California IWMB standards and ITSLs.
 - Onsite structures: There are no onsite structures in Areas 6 and 7.
 - Data trends: Critical wells in Area 7 are shown in Table 4.18D.
- 2. Well VW-25 (RI well) has shown elevated methane levels during 1998 and 1999. After completion of the SVE testing in Area 7, the methane concentrations in VW-25 have dropped from approximately 50.7 and 33.4 percent in February 1998 and April 1998, respectively, to 6.5 and 15.5 percent in the July 1998 and October 1998 monitoring. The July 1998 monitoring may have been affected by SVE activities in Area 7. Well VW-25 has continued to be monitored, and methane levels continue to remain at a lower level (14.5 percent in February 1999, 12.0 percent in April 1999 and 15.1 percent in August 1999).
- 3. Tables 4.17 and 4.18A provide a summary of the ITSL exceedances in Area 7.

4.3.1.5.5 Area 8

- 1. Vapor well monitoring in Area 8 has indicated the following conditions:
 - Perimeter wells: The perimeter wells in Area 8 are below the California IWMB standards and ITSLs.
 - Onsite structures: VW-13 (RI well) has shown elevated methane and vinyl chloride levels above the ITSL, but below IALs throughout 1998 and 1999. VW-23 (RI) has shown elevated TCE and vinyl chloride levels throughout 1998 and 1999. In-business air monitoring of structures in these areas has not shown an indication of soil gas infiltration.
 - Data trends: Table 4.18E shows the critical wells in Area 8.



- Other compounds: Area 8 appears to have more detectable levels of chlorinated solvents, (i.e., PCE, TCE, etc.) especially in the southeastern portion. Well VW-22 (RI well) exceeded the ITSL for TCE in the four quarters of monitoring.
- 2. In Area 8, VW-23, which has shown elevated levels of vinyl chloride and TCE above the ITSL, has shown a steady decrease in concentration throughout 1998 and 1999.
- 3. Soil gas levels in Area 8 appear to be stable, and in several cases are decreasing. Tables 4.17, 4.17A, 4.18, and 4.18A provide a summary of the ITSL exceedances in Area 8.
- 4.3.1.5.6 Soil Gas Results for the Ten Nested Wells Installed by EPA in July 1998
- 1. The ten new nested wells installed in July 1998 have shown the following results for five quarters of monitoring (see Tables 4.18 and 4.18E).

Area 1

- VW-62 (shallow) Methane exceedance for the five quarters of monitoring.
- VW-62 (intermediate and deep)

 Vinyl chloride exceedance in the Fourth
 Quarter 1998. Exceedances were not shown
 in 1999.

Area 8

- VW-55 (shallow) Methane exceedance in Fourth Quarter 1998 and First and Second Quarters 1999.
- VW-55 (intermediate)
 Methane exceedance in First Quarter 1998
 TCE exceedance in Fourth Quarter 1998 and First through Third Quarters 1999.
 - Vinyl chloride exceedance in Fourth Quarter 1998 and through four Quarters in 1999.
 - VW-55 (deep)

 TCE exceedance in Fourth Quarter 1998,
 First and Third Quarters in 1999.
 - Vinyl chloride exceedance in Fourth Quarter 1998 and through four Quarters in 1999.
 - VW-56 (shallow)

 Vinyl chloride exceedance in Fourth Quarter 1998 and Third and Fourth Quarters in 1999
- VW-56 (intermediate and deep) TCE exceedance for the five quarters of monitoring.

VW-57 (intermediate)

- TCE exceedance for the first three quarters of monitoring.

VW-57 (deep)

- TCE exceedance for the five quarters of monitoring.

VW-58 (shallow, intermediate and deep) - TCE exceedance for the five quarters of monitoring.

VW-61 (intermediate)

- Vinyl chloride exceedances for the five quarters of monitoring.

4.3.2 ANNUAL IN-BUSINESS AIR MONITORING RESULTS

- 1. Annual In-Business Air Monitoring Reports were submitted to EPA in March 1999 and May 2001 to provide summaries and evaluations of the in-business air data collected by WDIG from February 1998 through November 1998 and February 1999 through October 1999, respectively at the Site.
- 2. The purpose of the annual reports is to review the indoor air conditions of multiple onsite businesses for the Site's primary COC (i.e., methane, benzene, TCE, PCE and toluene). The businesses that were monitored during 1998 and 1999 were selected by the EPA and WDIG based on their relative location to the buried waste at the Site (see Figure 4.29). Quarterly monitoring was performed with the following objectives:
 - Provide a summary of the in-business air data collected during 1998 and 1999 by WDIG.
 - Evaluate the data as to trends or other observations.
 - Evaluate the potential migration of soil gas contaminants into onsite buildings.
 - Provide a formal transmittal of the laboratory data and QA/QC information to EPA.
 - Update the In-Business Air Monitoring program, based on the findings of the in-business air conditions.
- 3. The data is based on ten sampling events (February 1998 through October 1999 timeframe). The indoor air monitoring was initially performed on a monthly basis as requested by EPA because of concerns of potential in-business exposures. After the initial three monitoring rounds (a total of 3 months), the monitoring was decreased to quarterly, concurrent with the vapor well monitoring.
- 4. Eleven onsite locations were monitored during 1998. Tables 4.19 and 4.19A show the sampling frequency in 1998 and 1999, respectively.



5. During WDIG's in-business air monitoring, additional information was collected on the chemical inventories for some of the businesses. Refer to Table 4.20 for a summary of the inventory data collected by EPA and the additional information collected by WDIG.

4.3.2.1 In-Business Air Monitoring Results

- 1. Tables 4.21 and 4.21A provide a summary of the COC ITSL exceedances for the in-business air monitoring in 1998 and 1999. Table 4.21B provides a summary of trend data for selected constituents.
- 2. Figures 4.29 and 4.29A summarize the analytical results for each sampling event conducted during 1998 and 1999 for the primary COCs.
- 3. As indicated above, the in-business air monitoring conducted during 1998 and 1999 has not shown an indication of soil gas infiltration into the onsite businesses. Exceedances of ITSLs appear to be from sources not related to the Site (i.e., use of VOC-containing materials related to business practices, vehicle exhaust). Data presented by EPA indicated that soil gas was not infiltrating into onsite businesses. WDIG has completed ten rounds of in-business monitoring and has confirmed that soil gas infiltration has not been observed.

4.3.3 TM NO. 9A - SOIL VAPOR EXTRACTION TREATABILITY STUDY

4.3.3.1 Introduction

- 1. The purpose of TM No. 9A activities was to develop additional field data on various soil gas parameters, including gas generation rates and gas conductivity, in designated areas which have shown elevated methane and VOC concentrations. TM No. 9A activities were performed in two phases. Phase I consisted of active SVE treatment at five designated areas of the Site. Phase II consisted of gas recovery monitoring which was initiated immediately following the Phase I activities.
- 2. The objectives of the SVE testing were to determine the following site-specific parameters at each of the five test locations:
 - Air conductivity in each layer adjacent to the gas-producing, sump-like material layer.
 - SVE radius of influence.
 - Flow versus vacuum ratios.
 - Long-term soil gas concentrations, including rebound.
 - Condensate production.
 - Vapor extraction system and treatment effectiveness.



3. TM No. 9A Phase I activities were completed between June 1998 to September 1998. The final monitoring round of the Phase II activities was completed in January 1999.

4.3.3.2 **SVE Testing Rationale**

- SVE testing was intended to provide information on the ability of SVE to remove subsurface soil gas (i.e., methane, VOCs) from the shallow fill zone and the underlying native soil, as well as to measure methane generation rates in these layers following SVE treatment. These parameters were determined by collecting both field measurements and analytical laboratory data on the SVE operating conditions and gas constituents during both Phase I and Phase II activities.
- 2. The SVE testing program was designed to generate data on the ability of an induced subsurface vacuum to withdraw soil gas from five onsite locations selected to represent the different combinations of soil conditions and the proximity between sump-like material and onsite buildings. Refer to Figure 4.30 for test area locations. The SVE data were used to evaluate the air conductivity and potential zone of influence in each area. This measured ability or inability to withdraw soil gas is critical to future consideration of vacuum induced soil gas controls as potentially viable remedial options, including the potential for soil gas migration control by SVE.
- 3. Four of the five SVE test locations were selected based on the presence of sump-like material near potential surface receptors, such as onsite commercial/industrial buildings. The fifth area, Area 8, was included in the test because, although it is outside the footprint of the buried waste, vapor wells in the area have previously shown elevated levels of VOCs during quarterly soil gas monitoring.

4.3.3.3 <u>Summary of TM No. 9A Activities</u>

- 1. The SOW for TM No. 9A activities included the following list of tasks for each SVE test area:
 - Installation of two extraction wells (one shallow well in the fill soils and one deep well in the native soils), eight monitoring wells (four shallow and four deep) and four air injection wells (four deep).
 - Monitoring of baseline conditions of extraction wells.
 - Monitoring performance of the SVE unit, soil gas concentrations and radius of influence during Phase I.
 - Monitoring the soil gas recovery rates during Phase II.

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- 2. The results of SVE testing were used to calculate the following specific soil gas parameters:
 - Air conductivity in the test layers (i.e., fill and native material).
 - Methane generation.
- 3. In four of the five test locations two soil vapor extraction wells (one shallow and one deep) were installed. The SVE extraction wells were then surrounded with a specific geometric pattern of zone of influence monitoring wells, and air injection wells. The zone of influence monitoring wells were increasingly distant in different directions from the extraction well to determine the maximum distance at which the extraction vacuum can be measured. In the RV storage lot (Area 2) test location, one shallow extraction well and four shallow monitoring wells were completed, due to of the presence of a perched water zone in the deeper native material. Air injection wells were installed in the native soil, beneath the buried waste layer, except in Area 8, which was located outside the buried waste. As indicated above, in the RV storage lot (Area 2), only the shallow test wells were completed, and therefore no air injection wells were installed. The injection wells were arranged in a square geometry around the extraction wells to allow the subsurface area to be swept by SVE.
- 4. The stratigraphy of the materials encountered was relatively consistent. A silty sand to sandy silt fill layer of at least 5 feet thick occurs over a layer of stained clays (drilling muds), comprising the buried waste. The RV storage lot (Area 2) did not have a deep zone of monitoring because of a perched water zone in the native zone. Area 8 was located outside the buried waste, and therefore buried waste was not encountered.
- 5. Prior to the start of SVE operations, the extraction well was purged of two to three well volumes, or until a steady soil gas concentration was observed. The purged gas was monitored for Oxygen (O₂), methane, Carbon Dioxide (CO₂) and total VOCs using field instruments (i.e., LANDTEK Methane Monitor).
- 6. A vacuum was then applied to the extraction well using a commercially available SVE unit rented from King Buck, Inc. of San Diego, California. The gas extracted from the well was treated using a catalytic oxidizer built into the SVE unit and discharged to the atmosphere.
- 7. Throughout TM No. 9A activities (Phases I and II), the following data were collected on a routine basis from the extraction well, and from the postblower and stack sample points on the SVE unit:
 - Blower vacuum.
 - Blower flow rate.
 - Barometric pressure.

- Concentrations of the following parameters were monitored by field equipment and sampled using summa canisters for laboratory analysis:
 - Methane
 - Total Non-Methane Organic Compounds
 - O₂
 - CO_2
 - Benzene
 - Vinyl Chloride
 - Other VOCs

The vacuum in the zone of influence monitoring wells and the extraction wells was also monitored on a regular basis.

- 8. After a pressure equilibrium was achieved at the maximum vacuum and flow fields, the SVE test was run under constant conditions for up to 2 weeks until soil gas levels became asymptotic or reached acceptable levels. At the end of the active SVE testing phase (Phase I), the system and extraction well were sampled, and then shut off to allow recovery of the system (Phase II).
- 9. During the recovery monitoring phase (Phase II), EPA requested that monitoring of the zone of influence wells be conducted. During this additional monitoring phase, it was determined that the O₂ levels were unexpectedly high in some of the extraction and monitoring wells. It was therefore determined that the SVE extraction and monitoring wells be purged of at least one to three well volumes prior to sampling. The well purging process was continued throughout the remainder of the Phase II activities. During this sampling, all of the extraction, monitoring and air injection wells were purged and sampled. Only field data were collected from these wells.

4.3.3.4 Summary of TM No. 9A Results

4.3.3.4.1 Zone of Influence Calculation Results

- 1. Various methods have been used to evaluate the potential zone of influence by SVE. The most practical method to estimate the zone of influence is to graph the observed vacuum in monitoring probes versus the distance from the SVE extraction well.
- 2. Using the observed vacuum levels collected during TM No. 9A activities from the various monitoring points, the data were plotted for each area. Table 4.22 provides a summary of the estimated zones of influence by area.



- 3. Based on the estimated zone of influences presented in Table 4.22, the following was observed in relation to the SVE zone of influence:
 - Shallow areas demonstrated limited zones of influence because of the following conditions:
 - Shallow soils were affected by vertical air infiltration.
 - Shallow soils are more prone to preferential pathways, which can reduce the effective zone of influence.
 - Deep zones demonstrated larger calculated zones of influence ranging from 122 feet to 200 feet. The observed larger zones of influence in the deep soils are likely because of the following reasons:
 - Local lithology of deep zones indicate a higher potential permeability.
 - Deep SVE zones were covered by a low permeable waste layer which increases the effective vacuum by preventing vertical leakage during SVE.
 - Native soils in the deep SVE test are less likely to exhibit preferential flow because of utilities (e.g., pipeline) or other disturbances, as compared to the shallow soils.
- 4. Based on the SVE data presented in Chapter 3.0 of the Report of Findings (TRC, 1999c), and the zone of influence calculations presented above, the TM No. 9A results indicate that SVE using conventional extraction techniques (i.e., less than 100 in. WC) and equipment was able to:
 - Generate a zone of influence greater than 30 feet in the shallow fill soils.
 - Generate a substantially greater zone of influence, ranging from 122 to 200 feet in the deep native soils. In actual field conditions an effective zone of influence of 80 to 100 feet would be expected.

4.3.3.4.2 Air Conductivity Modeling Results

- To further evaluate the SVE data, the U.S. Army Corp. of Engineers recommended using an SVE data reduction model called GASSOLVE, which was developed by Clemson University. The focus of this model was to calculate the intrinsic permeability of the soil, using various SVE data inputs, and assumptions and default parameters. The GASSOLVE model calculated the intrinsic permeability, both horizontally and vertically, along with a statistical evaluation of error range of the permeability estimate.
- 2. The GASSOLVE results for the shallow SVE tests indicated the following:
 - Horizontal Permeability Permeabilities ranged from 1.8 x 10⁻⁸ m² in Area 5, to 6.2 x 10⁻¹² m² in Area 7 (see Table 4.23). This indicates a generally low permeability soil type consistent with silty sands.



- Vertical Permeability Vertical permeabilities for the shallow soils were generally on the same order of magnitude as the horizontal permeability, indicating significant surface leakage.
- Average Error Average errors were generally low (see Table 4.23), with the exception of Area 5. The average error in Area 5 was 33.6 percent. This appears to be caused by variations flow rates and in vacuum levels during testing. The variation in results may be related to short circuiting along preferential pathways, since the area has been subject to various disturbances.
- 3. The GASSOLVE results for the deep SVE tests indicated the following:
 - Horizontal Permeability Permeabilities ranged from 5.4 x 10⁻¹¹ m² at the west corner of Area 2 to 8.9 x 10⁻¹¹ m² in Area 5 (see Table 4.23). This indicates a slightly more permeable soil type relative to the shallow soils.
 - Vertical Permeability Vertical permeabilities were generally 2 to 4 orders of magnitude lower than the horizontal permeabilities, indicating only marginal air leakage from the surface.
 - Average Error Average errors were generally very low (e.g., less than 5 percent) (see Table 4.23).
- 4. Table 4.24 provides a comparison of the calculated intrinsic permeabilities and the local lithology as discussed above. As shown in Table 4.24, the results of the GASSOLVE modeling are comparable to the local soil conditions.

4.3.3.4.3 Soil Gas Recovery and Generation Evaluation

- 1. During the soil gas recovery monitoring, the SVE treated areas appeared to go through three phases. These phases were:
 - **Prior to Purging** After discontinuation of the active SVE, the gas levels (e.g., methane, CO₂ and O₂) remained relatively stable.
 - Aerobic Phase During this phase, the wells showed increasing levels of CO₂ and slightly decreasing O₂ levels. This trend appears consistent with aerobic degradation of petroleum hydrocarbons in the soil.
 - Anaerobic Phase After CO₂ levels increased and oxygen levels decreased, low levels of methane were observed to gradually increase. This is consistent with anaerobic degradation of petroleum hydrocarbons.
- 2. Table 4.25 provides a summary of the soil gas levels at the time of SVE shutdown, and the final soil gas recovery monitoring conducted in January 1999.



- 3. The following trends were observed during the SVE and monitoring periods:
 - Shallow Soils:
 - Shallow soils demonstrated very low methane levels and slightly elevated CO₂, as shown in Figure 4.31.
 - O₂ levels decreased during the rebound monitoring as anticipated.
 - Benzene levels were generally below ITSLs and declined throughout the test as shown in Figure 4.32.
 - Vinyl chloride levels exceeded the ITSL during the initial rebound phase but declined during further monitoring as shown in Figure 4.33.

Deep Soils:

- Methane levels increased only slightly during rebound monitoring as compared to the shutdown levels, as shown in Figure 4.31.
- Benzene levels were generally below ITSLs and declined throughout the test as shown in Figure 4.32.
- Vinyl chloride levels exceeded the ITSL during the initial rebound phase but declined during further monitoring as shown in Figure 4.33.
- O₂ levels decreased in all areas except Area 8, which is consistent with biodegradation. Area 8 O₂ levels increased slightly.
- CO₂ levels increased in all areas except Area 8, which is also consistent with biodegradation. The CO₂ levels in Area 8 decreased slightly.
- 4. SVE test data were used to calculate methane generation, based on the concentration in the extraction flow rate. The methane generation rate was calculated separately for SVE tests in the shallow fill layer and in the deep native soil layer. These generation rates were compared with the fundamental calculation discussed next.
- 5. The potential rate at which gas is generated in the buried waste was first evaluated on a theoretical basis, using the anaerobic reactions that decompose petroleum hydrocarbons and other organic compounds. The buried waste below the cover fill layer were represented by a generic alkane, whose size, CH₂₄H₅₁, is midway in the range of hydrocarbons found at the Site. This layer of buried waste is assumed to be the only source of significant gas generation.
- 6. Overall, the low gas generation rate in the buried waste appears incapable of causing enough upward or outward migration of methane and other constituents to be a health risk to people working in onsite businesses or offsite residences, schools, etc. The flux is also so low that it may potentially be safely vented to the atmosphere rather than requiring a gas destruction system. As an example, in the area of the west corner of Area 2, some localized hot

spots were observed during SVE rebound monitoring. These hot spots appear isolated, and may be related to localized waste materials or other debris disposed in the area, which is consistent with the small mass of contaminants observed in the extracted gas.

4.3.3.4.4 Summary of SVE Performance

- 1. The objective of the treatability testing was to evaluate the performance of SVE under field conditions. As part of the treatability study, the following performance characteristics were evaluated:
 - Well extraction performance characteristics (i.e., step tests):
 - Step testing was attempted, but was not considered crucial, since the existing vapor well design has clearly established the well design characteristics and capabilities.
 - In-situ air permeability:
 - This was determined using the GASSOLVE modeling.
 - Well gas and effluent gas contaminant concentrations.
 - Potential effects of SVE on local conditions such as ground water.
- 2. To evaluate the SVE performance, constant rate performance testing was used. Constant rate performance tests are conducted under steady-state conditions to assure that a representative area of influence is obtained. Relatively stable flow conditions were produced. One exception was the shallow Area 7 wells, which exhibited low corrected flows because of the low permeability of the soils.
- 3. Based on the results of the zone of influence modeling, the GASSOLVE modeling and the gas recovery data, the objective of the SVE performance evaluation has been achieved.

 This includes:
 - Well extraction characteristics:
 - Sufficient data were obtained on wellhead flow and vacuum to allow, if necessary, for design of an SVE system.
 - Sufficient data were obtained on the well characteristics to evaluate the feasibility of SVE for remedial selection purposes.
 - In-situ air permeability:
 - Sufficient air permeability data were collected in five distinct Site areas and at two depths as indicated by the GASSOLVE modeling results.
 - Well gas at effluent gas constituent concentrations:
 - Sufficient data were generated on the soil gas characteristics to allow, if necessary, the design of an SVE system as part of a remedial action.



- Potential effects of SVE on local conditions:
 - Effects were not observed on ground water levels in the test area.

4.3.3.4.5 SVE Gas Recovery Estimates

- 1. As part of the TM No. 9A evaluations, an estimate of the mass of contaminants removed during SVE activities was calculated using the method indicated in *Soil Vapor Extraction and Bioventing*, U.S. Army Corps of Engineers (EPA 1110-1-4001, November 1995).
- 2. As indicated in Table 4.26, the mass removal estimates indicated the following:
 - Shallow Soils:
 - Methane removal ranged from 0.14 pounds (lbs) in Area 5 to 4.2 lbs in Area 7.
 - Benzene removal ranged from 0 lbs in Areas 5 and 8 to 7.0 x 10⁻⁵ lbs at the west corner of Area 2.
 - Vinyl chloride removal ranged from 0 lbs in Areas 7, 8 and 5 to 2.0 x 10⁻⁵ lbs at the west corner of Area 2.
 - Deep Soils:
 - Methane removal in the deep soils was significantly greater than in the shallow soils. Removal levels ranged from 0.17 lbs in Area 8 to 977 lbs in Area 5. As shown in Table 4.26, both Area 5 and the west corner of Area 2 yielded substantially larger masses of methane than the other areas. This is consistent with the levels of methane observed during active SVE.
 - Benzene removal in the deep soils was consistent with the shallow soil results. Removal masses ranged from 0 to 0.019 lbs in Area 5.
 - Vinyl chloride removal from the deep soils was also consistent with the shallow soils removal levels. Removal levels ranged from 0 to 0.0128 lbs in Area 5.

4.3.3.4.6 SVE Gas Treatment Evaluation

- 1. As part of the overall evaluation of SVE as a potential Remedial Technology for gas control at the Site, an evaluation of the offgas treatment technology was included as one of the overall objectives. Treatment technologies for methane and VOC containing gas streams include the following:
 - Direct emission or release.
 - Adsorption into carbon.
 - Incineration:
 - Incineration using controlled temperature and air flow.
 - Incineration using direct combustion, such as flares.
 - Catalytic oxidation.

- 2. Treatment or destruction efficiency observed during the above SVE activities ranged from 0 to approximately 60 percent. These levels are relatively lower than anticipated. Although the destruction efficiency was low, there was no significant release of soil gas constituents to the atmosphere. The reasons for the lower-than-expected treatment levels may include the following:
 - Low Oxygen Concentrations O₂ is required to be present in the gas stream for a catalytic oxidizer to perform optimally. In most of the test areas, O₂ levels were generally low (i.e., the west corner of Area 2, deep testing), which may have prevented or reduced the efficiency of the catalytic oxidizer. Intake air, added to the air stream is designed to increase O₂ levels and improve treatment.
 - Low Contaminant Concentrations The actual mass of contaminants extracted was relatively low in comparison to typical SVE sites, such as underground storage tanks (USTs) and gasoline station cleanup. As the concentration of the gas stream decreases, generally the destruction efficiency also decreases.
 - Catalytic Oxidizer Temperature The catalytic oxidizer temperature may have been too low to initiate oxidation reaction, given low O₂ levels and low constituent levels.

4.3.3.5 Summary of Findings

- 1. Based on the data collected during TM No. 9A activities, the following findings are reported:
 - Site gas generation (i.e., rebound) was very low which is consistent with the gas generation levels theoretically determined in the February 1998 gas generation calculations submitted to EPA.
 - TM No. 9A rebound data confirms that the Site has a low overall gas generation potential.
 - SVE was shown to be effective in reducing soil gas levels in the selected areas.
 - Soil gas extraction removed a relatively small mass of contaminants, (i.e., lbs) as compared to typical landfill or gas station remediation which can generate tons of material.
 - Very low levels of soil gases were extracted from the shallow fill soils adjacent to buildings, indicating that the fill soils are not a significant potential source of emissions to onsite businesses.
 - In the deep soils, SVE reduced the soil gas levels significantly, and created a large zone of influence which appears to have temporarily enhanced aerobic biodegradation of the petroleum hydrocarbons.



2. SVE has been shown to be technically feasible for the control of soil gases in the areas outside the reservoir area. Furthermore, SVE data also indicate that a passive technology, such as passive bioventing, may be feasible for gas control at the Site. Data collected during TM No. 9A will be used during the FS to further evaluate the control of soil gas in selected areas at the Site.

4.4 ANNUAL GROUND WATER MONITORING

- 1. Annual reports were submitted to EPA in March 1999 and May 2001 to review the ground water conditions at the Site and to evaluate potential ground water contamination from WDI sources (TRC, 1999d). The reports were prepared with the following objectives:
 - Summarize the ground water data collected by the WDIG from September 1997 through October 1999.
 - Evaluate the data as to trends or other observations.
 - Provide a formal transmittal of the laboratory data and QA/QC to the EPA.
 - Submit proposed modifications to the current ground water monitoring program, based on the findings of historical and current ground water conditions.
- 2. On January 14, 1999, CDM Federal submitted to the EPA a ground water evaluation report for the Site (CDM Federal, 1999d). The purpose of the evaluation was to review and assess the ground water monitoring and source characterization data, to update the conceptual model for the Site, and to establish a framework for future long-term ground water monitoring programs. These findings have been incorporated herein.

4.4.1 REGIONAL AND SITE HYDROGEOLOGIC CONDITIONS

1. CDM Federal's Ground Water Data Evaluation Report provides a detailed description of the regional and site hydrogeologic conditions. The source for CDM Federal's hydrogeologic summary was collected from previous site investigations/characterizations conducted during the 1988-1989 RI (EBASCO, 1989b) and subsequent site monitoring data. The following sections summarize the information provided in CDM Federal's report.

4.4.1.1 Regional Hydrogeologic Conditions

1. The Site is located in the Whittier Area in the Montebello Forebay of the Los Angeles Central Ground Water Basin. Regional geological maps indicate that recent age alluvium sediments,

consisting of sand and gravel, with occasional lenses of clay underlie the Site. The recent sediments in the near vicinity of the Site attain a maximum thickness of approximately 80 feet and are underlain by the Lakewood and San Pedro formations (primarily Pleistocene age fluvial sedimentary deposits).

2. The Lakewood formation includes the Artesia and Gage aquifers. These aquifers consist of mostly sand interbedded with clay lenses. The Hollydale, Jefferson, Lynwood, Silverado and Sunnyside aquifers are found in the San Pedro formation. This formation consists mostly of sands and gravels, which are also separated by clay lenses.

4.4.1.2 Site Hydrogeologic Conditions

- 1. Based on RI soil boring characterization (EBASCO, 1989a), the subsurface stratigraphy and materials encountered at the Site include:
 - Five to 15 feet of fill material covering the concrete reservoir, waste containment areas, and most of the remainder site.
 - An interval of clay and sandy silt, 10 to 25 feet thick underlies the fill and buried waste.
 - The near-surface silt layer is underlain by sandy, pebbly, channelized braid river (fluvial) deposits, at least 50 feet thick. These fluvial deposits include medium- and coarse-grained sand and fine-gravel interbedded with discontinuous layers and lenses of clay and silt. A 10-foot thick unit of silt and clay is interbedded with the coarser-grained river deposits in the southeast portion of the Site.
 - During the 1988-1989 soil boring investigation, ground water was encountered in the upper interval of the sandy and pebbly river deposits at depths ranging from 48 to 65 feet bgs.
 - RI borings, drilled to depths of 80 to 130 feet bgs, indicate that interbedded sand and pebbly sand units underlie the shallower fluvial channelized deposits.
- 2. Recent monitoring (October 1998) shows the depth to ground water at the Site to range from approximately 28.5 feet bgs (GW-02) to 48.5 feet bgs (GW-23 and -24). Tables 4.27 and 4.27A show recent ground water depths measured at the Site during October 1998 and October 1999, respectively. Table 4.28 shows historical ground water elevations at the Site since October 1988.
- 3. Ground water flow at the Site is to the south and southwest. Refer to Figure 4.34 showing the ground water contour map during the October 1998 monitoring period for the Site. Figure 4.34A shows ground water contours during the October 1999 monitoring period.

4.4.1.3 Site Ground Water Conditions

- CDM Federal calculated the hydraulic gradients (horizontal and vertical), flow velocity and prepared hydrographs for the ground water conditions using monitoring data collected prior to September 1997. The following summarizes the information provided by CDM Federal:
 - Horizontal Ground Water Gradient:
 - Ranges from 0.002 feet/foot (western portion) to 0.003 feet/foot (eastern portion).
 - Increase to 0.035 feet/foot at the southwest corner of the Site.
 - Vertical Ground Water Gradient:
 - Maximum downward gradient was 0.052 feet/foot (GW-15 and -16).
 - Vertical hydraulic gradients for well pairs were similar for the 1991 and 1997 monitoring events.
 - However, a significant elevation difference (6.03 feet) and downward gradient (0.121 feet/foot) was observed at well pair GW-23 and -24.
 - Ground Water Flow Velocity:
 - Based on assumed hydraulic conductivities (50 gallons per day per square foot [gpd/ft²] for silty/clayey sand; 500 gpd/ft² for pebbly sand), velocity of the ground water flow at the Site is estimated to range from 6 to 60 feet/year (EPA, 1993a).
 - Ground Water Hydrographs:
 - Water level trends evident for each well are similar with a moderate increase in water level between 1988 and 1992, and a pronounced increase between August 1992 and June 1995 monitoring events. September 1997 water levels have declined less than 1-foot from levels observed during September 1995.
 - During the monitoring period reviewed, the highest ground water elevation measured in the vicinity of the buried reservoir was 119.9 feet above mean sea level (msl) (GW-04, September 1995), which is approximately 20 feet below the estimated base of the concrete reservoir.
 - The pronounced rise in water levels documented in the Site wells for 1992 through 1995 were explained as a period of active aquifer recharging in the Montebello Forebay spreading grounds, which are located immediately north and upgradient of the Site. Water levels in the Montebello Forebay wells rose 10 feet or more during this period as a result of the water replenishment operations (TRC, 1996b).
 - Ground water elevations appear to have stabilized with minimal fluctuations in depths since 1995. Refer to Table 4.28 showing the change in elevation from previous monitoring episodes.
- 2. Since the physical characteristics (i.e., depth to ground water, flow direction) of the ground water conditions have not changed significantly at the Site during WDIG's 1998 monitoring program, WDIG concurs with CDM Federal's ground water findings.

4.4.2 GROUND WATER SAMPLING RESULTS

- This section summarizes the chemical characteristics of ground water conditions at the Site.
 This summary was generated from the data compiled since ground water monitoring was initiated in 1988.
- 2. In September 1997, site ground water monitoring was reinstated when split sampling occurred with EPA and WDIG. Since then, WDIG has been performing quarterly sampling of the complete well network at the Site. Table 4.29 provides the EPA methods used for laboratory analysis of the ground water samples collected by WDIG. Table 4.30 provides a summary of trend data for selected ground water wells for TCE, PCE, benzene, and toluene. Figures 4.35, 4.35A, 4.36, 4.36A, 437, 4.37A and 4.38 provide summaries of the ground water monitoring data.
- 3. The following summarizes the analytical ground water conditions at the Site conducted by EPA and WDIG sampling events since 1988:
 - VOCs:
 - The most common VOCs reported for ground water samples are TCE and PCE.
 - TCE and PCE are the VOCs that have been detected above their MCL (5 μg/L for both parameters) in ground water samples.
 - Toluene was detected during several of EPA's monitoring events.

SVOCs:

- Ground water analysis for SVOCs since 1988 has indicated no consistent pattern and are typically not detected in the ground water at the Site. SVOC detection may be the result of trace levels generated from laboratory contamination.
- Pesticides/PCBs:
 - Pesticides or PCBs have not been detected in the ground water.
- Metals:
 - Arsenic, chromium and lead analyses for ground water samples do not show consistent distribution or detection above the MCL for these metals. Elevated concentrations of arsenic and chromium have been reported for the upgradient monitoring well (i.e., GW-01), but not consistently for wells across the Site. This indicates that the presence of arsenic and chromium may be an artifact or anomaly related to the GW-01 well location.
 - Ground water metals analyses have shown elevated concentrations of aluminum, iron, manganese, and selenium, locally at concentrations above primary or secondary drinking water standards (CDM Federal, 1999d). However, the consistency and distribution of detections (i.e., higher concentrations in upgradient wells) suggest that

elevated concentrations of these metals represent a regional ground water quality condition, which probably is not related to migration from WDI waste sources.

LNAPL and DNAPL:

- At the Site, the measured concentrations of VOCs dissolved in ground water have not exceeded 100 μg/L for potential LNAPL/DNAPL constituents. Therefore, because the ground water beneath the Site does not contain dissolved solvents or BTEX at concentrations exceeding 100 μg/L, and an oily sheen has not been observed in any ground water sample, it can be concluded, at present, that LNAPL or DNAPL sources are not contributing to ground water contamination at the Site.

4.4.3 SUMMARY

- 1. Several site COC (VOCs and metals) have been detected above their respective MCLs in the ground water samples. However, these exceedances do not appear to be related to site wastes based on their distribution in ground water (i.e., some contaminants are detected upgradient or cross-gradient from WDI waste sources).
- 2. VOCs detected in ground water samples are primarily PCE and TCE, with concentrations generally less than 20 μg/L. PCE and TCE concentrations in several locations are above their respective MCL of 5 μg/L for primary drinking water. These VOCs have been detected only in the western part of the Site in both upgradient and deep monitoring wells. Based on the collected data and information on offsite ground water contamination sites, the sources of PCE and TCE detected in the western portion of the Site appears to be from solvent releases associated with upgradient industrial sites.
- 3. Toluene has been detected sporadically by EPA (maximum concentration was 64 μ g/L which is below its MCL[150 μ g/L]) in ground water sampled adjacent to and downgradient of WDI waste sources. WDIG has not detected toluene in the ground water since April 1998.
- 4. CDM Federal concludes in their Ground Water Data Evaluation Report that a significant impact on ground water has not been identified from the Site based on available ground water sampling results and the location and characteristics of the waste sources at the Site. WDIG concurs with this conclusion since data collected by WDIG from September 1997 through October 1998 are consistent with CDM Federal's.

Rev. 2.0, 5/4/01 4-48

4.5 STORMWATER

4.5.1 STORMWATER MONITORING

- 1. The Site's Stormwater Pollution Prevention Plan (SWPPP) has two objectives: (1) identify existing and potential sources of pollution which may affect the quality of stormwater discharges associated with the Site, and (2) propose and implement the necessary practices that will reduce the introduction of the potential pollutants into stormwater discharges associated with specific areas of the Site.
- 2. In 1998, WDIG and EPA designated five stormwater monitoring points onsite to meet the objectives of the SWPPP. Refer to Figure 4.39 for the locations of the monitoring points. Two of the monitoring points were designed to prevent potential flooding of buildings at two locations. Surface water runoff at the Site is conveyed through sheet flow and concentrated surface flow areas.
- 3. Analytical samples collected during the 1997-1998 rainy season indicated the following:
 - Low levels of total suspended solids.
 - Low levels of metals typical of surface soils.
 - Significant levels of site COC were not detected.

Results of the stormwater samples are provided in Appendix G.

4.5.2 TM NO. 11 ACTIVITIES

- Prior to the 1998-1999 rainy season, WDIG improved site conditions as described in TM No. 11 - Reservoir Area Grading and Waste/Debris Management (TRC, 1998a).
 The SOW primarily consisted of improving the stormwater drainage from the reservoir area to adjacent areas and structures. The SOW also included the disposal of various investigative derived wastes and other miscellaneous debris from the reservoir area of the Site.
- 2. The following activities were conducted in accordance with the TM No. 11 SOW:
 - Disposal of liquids, clean-out and removal of Baker Tanks.
 - Transportation of miscellaneous debris and concrete material from onsite stockpiles to offsite facilities.
 - Disposal of soil cuttings generated from previous EPA and WDIG soil investigations and monitoring well installations contained in 55-gallon drums, roll-off bins and soil sample cores.
 - Relocation of abandoned city bus from central portion of the reservoir area to the RV Storage Lot.



- Elevation modifications to existing monitoring wells and probes within the reservoir area.
- Regrading of the reservoir area.
- Construction of drainage ditches and berms in selected areas.
- Decontamination and removal of empty 55-gallon drums to an offsite facility.
- Reseeding graded areas, including drainage ditches and berms.
- 3. The rationale for performing the activities outlined in TM No. 11 were as follows:
 - Reduce potential for flooding of nearby businesses (i.e., C&E Die, Buffalo Bullet and H&H Contractors).
 - Reduce potential for surface water infiltration into the concrete lined reservoir area.
 - Final management of investigative derived wastes and miscellaneous debris generated during EPA and WDIG field activities.
- 4. The SOW performed during TM No. 11 field activities met the requirements outlined in specifications provided in the TM (refer to TM No. 11 Reservoir Area Grading Plans and Waste/Debris Management, dated September 1998 [TRC, 1998a]).

5.0 COMPREHENSIVE SUMMARY OF SITE CONDITIONS

1. Based on the investigations presented in Chapters 2.0, 3.0 and 4.0, an overall understanding of the Site conditions has been developed and is shown in Figure 5.1. Media-specific summaries are shown in Tables 5.1 through 5.4. The tables and figures show that the Site can be divided into various zones so that different remedial alternatives can be evaluated in the Supplemental Feasibility Study (SFS) for each area based on the specific local site conditions. The following sections summarize the Site media conditions.

5.1 SUMMARY OF SOIL AND PERCHED LIQUIDS CONDITIONS

- Figure 5.2 provides a delineation of the boundary of the extent of the buried waste, as
 determined using EPA and WDIG data collected during field activities conducted between
 1988 through 2000. The extent of the buried waste has been extended from the 1989 ROD
 and the 1995 Predesign limits.
- 2. Table 5.1 provides a brief summary of the findings of the soil investigations completed at the Site between 1971 and 2000. Results of the chemical characterization of the fill soils, the buried waste and the native soils indicate that the buried waste outside the reservoir are composed primarily of drilling muds mixed with minor amounts of debris and waste. Results of the 1997 WDI geoprobe chemical analyses indicate that these materials contain CERCLA hazardous constituents. However, results of limited soils testing performed during TM No. 10 activities indicate that these materials are generally nonhazardous by TCLP and STLC criteria. In addition, analyses performed during the SSI were generally below site cleanup levels and/or EPA PRGs. As previously discussed, some elevated levels of arsenic, beryllium, lead, zinc and some VOCs and SVOCs were observed in the fill material during the 1988-2000 RI activities (see Figures 2.8 to 2.10), but have been found to be below hazardous levels by TCLP and STLC testing.
- 3. A cross section showing the Site lithology is shown in Figure 5.3. This figure provides an illustration of the subsurface soils of the Site.
- 4. The reservoir materials consist of approximately 5 to 15 feet of overlying fill soils intermixed with broken concrete and construction debris, and approximately 10 to 17 feet of buried waste as discussed in Chapters 3.0 and 4.0. The buried waste is composed of drilling muds, soils,



liquids and light crude oils. Chemical characterization of the reservoir materials has indicated the presence of elevated levels of the following types of constituents as indicated in Table 5.1:

- VOCs
 - Methane
 - BTEX
 - Vinyl Chloride
 - Chlorinated Solvents
 - Aliphatic Hydrocarbons
- Metals
 - Arsenic
 - Beryllium
 - Lead
 - Zinc
- 5. Materials outside the reservoir consist of overlying fill material varying from approximately 0 to 10 feet in thickness. The fill is intermixed with broken concrete and construction debris. Buried waste was also encountered outside the reservoir boundary typically ranging in thickness of a thin layer (e.g., less than 1 foot) to 12 feet. The drilling muds are intermixed with broken concrete, construction debris, liquids and light crude oil.
- 6. Reservoir liquids investigations performed by EPA and WDIG are summarized in Table 5.4. Results of these investigations indicate that the reservoir liquids contain CERCLA hazardous constituents, but at levels below the hazardous criteria. An exception is the presence of elevated PCB concentration in some areas, as discussed in Section 4.2.2.1.3.
- 7. Analyses of two perched liquid samples collected during the geoprobe investigation outside the reservoir resulted in no detectable levels of VOCs. These perched liquids are most likely infiltrated rainwater. Figure 5.4 shows the location of the liquids both inside and outside the reservoir boundary. Liquids encountered outside the reservoir were observed during the 1988-1989 RI and activities conducted during 1997 and 1998 field investigations by EPA and WDIG.
- 8. During performance of TM No. 13 from May 26, 1999, to June 2, 2000, approximately 130,150 gallons of liquids (800 gallons of oil and 129,350 gallons of water) were extracted from the reservoir (TRC, 2000). The data collected indicate that the large-scale extraction of liquids is feasible, but is not practical based on the relatively low sustained pumping rates observed. It appears that a significant portion of the free liquids have already been extracted and that continued largescale liquids removal will have little effect on reducing overall risks due to the Site. It is uncertain what percentage of the total liquids free liquids have been removed

because the total volume in the reservoir cannot be estimated with a high level of confidence. However, liquid levels have decreased in each of the monitoring and extraction wells. This reduces overall Site risks. The volume of water extracted from the wells has not generated a corresponding volume of oil extraction. This may result from the following:

- The oil is heavy and therefore is not mobile.
- The drilling muds retard migration.
- The water is coming from the fill/waste interface.

The ratio of oil to water extracted from the system is on the order of 1:0.006, even though significantly measurable oil columns were observed prior to extraction. As the wells have been pumped, the thickness of the oil columns in the wells has decreased.

5.2 SUMMARY OF SOIL GAS CONDITIONS

- 1. As indicated in Table 5.2, based on the results of the RI, and the 1997-1998 EPA and WDIG investigations, elevated levels of methane and VOCs are not prevalent over most of the Site, except within or near the boundary of the buried waste. Table 4.16A provides a summary of trend data for selected soil gas wells and for selected constituents. Figure 5.5 shows an aerial photo of the vapor well network locations. The satisfaction of state regulatory criteria for boundary areas and areas near to most structures has been confirmed with the exception of the areas shown in Figure 5.5.
- 2. The data presented above indicate a few isolated areas exceeding the CIWMB regulations for methane or the VOC ITSLs. Consistent exceedances of ITSLs in two or more monitoring periods were considered in identifying these areas. Using the ITSLs for site boundary (see Figures 5.6 through 5.9), the following areas with verified exceedances have been identified:
 - Reservoir.
 - Northwest Corner of Area 2 (RV storage lot).
 - C&E Die (Area 2).
 - Brothers Machine Shop (Area 5).
 - Northeast Portion of Area 8.
 - Area 8 near the Auto storage yard.
 - Southwest portion of Area 8.
 - Area 7 Pit.

The ITSLs and the COCs used for this evaluation are preliminary, and may be revised when the final action levels and COCs are determined by EPA.

- 3. In-business air monitoring conducted by EPA in August 1997, and by WDIG since February 1998, has not demonstrated soil gas infiltration into the onsite businesses, as summarized in Table 5.2. Table 4.2.1 provides a summary of trend data for selected in-business air sample locations and for selected constituents. EPA's Subsurface Gas Contingency Report concluded that soil gas infiltration was not observed during their monitoring activities, and that the VOCs detected during monitoring were consistent with the onsite business chemical inventories developed by EPA. WDIG has since completed seven rounds of in-business air monitoring, which has confirmed EPA's initial conclusion that soil gas infiltration has not been observed.
- 4. SVE treatability testing conducted in various Site locations, as described in Section 4.3.3, showed overall low levels of methane and VOCs. However, some elevated levels were observed in isolated wells before and after treatment of the area using SVE, as shown in Figures 4.31 through 4.33. SVE testing further showed that the volatile constituents could be removed by vapor extraction, and that the actual mass of soil gas constituents was relatively small. Based on the results of the SVE testing, methane generation rates were calculated, and were found to be very low.
- 5. Reservoir vapor well testing, using EPA's high vacuum extraction testing, indicated that the reservoir may contain high levels of methane and VOCs, as indicated in Table 5.2. However, high vacuum tests clearly indicate that the actual mass of methane and VOCs is limited, as evidenced by the dramatic drop in BTU levels during the first 24 hours (e.g., greater than 2,500 ppm methane). Based on this data, the reservoir does not appear to be generating large volumes of methane which is consistent with the gas generation calculations prepared in February 1998 and as discussed in Section 4.3.
- 6. Based on these results, soil gas at the boundaries of the waste zone appear to be isolated to a number of discrete areas of concern. The concentration and mass of the soil gases in these locations does not present a significant health risk, except in areas adjacent to onsite buildings.

5.3 SUMMARY OF GROUND WATER CONDITIONS

1. The results of ground water monitoring conducted at the Site since 1989 have not indicated any Site-related impacts. PCE and TCE has been detected in samples collected from several wells along the northern (upgradient) and western (cross-gradient) portion of the Site. The presence of PCE and TCE in the upgradient and cross-gradient wells coupled with the highest concentration being observed in the deeper wells, implies an upgradient (offsite) source of these contaminants. Several releases of contaminants have been reported in the area surrounding the



Site and ground water contaminant plumes are known to exist within the ground water basin in the vicinity of the Site. Ground water monitoring will continue at the Site and the trends will be observed by the regulatory agencies.

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REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 7

DATE	PHOTOGRAPH DESCRIPTION					
March 4, 1922	Areas 1, 2, 3, 4, 5, 6, 7 and 8:					
	 Site appears to be undeveloped). Santa Fe Springs Road borders the site to the west. Los Nietos Road borders the site to the south. 					
June 10, 1923	Areas 1, 2, 3, 4, 5, 6, 7 and 8:					
	 Appears to be a large tower-like structure (possibly oil well) with small structures (possibly buildings) adjacent to the tower in the southwest corner of Area 1. 					
February 13, 1924	Area 1:					
	Similar conditions as previous photograph. Large tower-like structure no longer exists in Area 1.					
	Area 2:					
	Reservoir:					
	- A large circular-shaped earthen berm and covered.					
	Area Outside Reservoir:					
	 Appears to be enclosed by a secondary square-shaped earthen (dirt) berm. Area within berm appears to be dirt-covered. 					
	Areas 3, 4, 5, 6, 7 and 8:					
	Areas seem to have disturbed ground (dirt covered with sparse vegetation).					
July 28, 1926	Areas 1, 2, 3, 4, 5, 6, 7 and 8:					
	 Similar conditions as previous photograph. Photo also shows high level of oil extraction activity in site vicinity. 					
1928	Area 1:					
	• The western half (along Santa Fe Springs Road) appears to be undeveloped (vegetative-covered) with dirt roads running parallel to Santa Fe Springs Road. Area extending from the northern boundary of Area 1 to the southern boundary of Area 2 along the eastern portion of Area 1 appears to be bordered possibly by a fence. There appears to be a light shaded area (possibly standing water) within the enclosed area in the southeast corner. Southern portion of area appears to be vegetative and dirt-covered.					
	Area 2:					
	Reservoir:					
	- Similar conditions as previous photograph.					
	Area Outside Reservoir:					
	- Similar conditions as previous photograph. There appears to be a dark elongated area to the northeast of the reservoir at the 1:00 position (possibly standing liquids). The area to the north of the secondary berm appears to be dirt and vegetative-covered and enclosed by a possible fence line. Area 2 appears to be bordered to the north by a dirt road. To the south beyond the secondary berm extending from the west corner of Area 2 to approximately the center, there appears to be a dark elongated area (possibly standing liquids).					
	Area 3:					
	Appears to be undeveloped (vegetative-covered) with a dirt road extending along the northern boundary.					
	Areas 4 and 5:					
	Appear to be undeveloped (vegetative and dirt-covered).					
	Areas 6 and 7:					
	 Appear to be undeveloped, but disturbed (vegetative and dirt-covered). Possible dirt roads throughout the area. 					

REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 2 of 7

DATE	PHOTOGRAPH DESCRIPTION					
1928 (Continued)	Area 8:					
19	 Appears to be undeveloped, but disturbed (vegetative and dirt-covered). Dirt roads appear throughout the area. The area along the northwest boundary appears to have a dark elongated area (possibly standing liquids). 					
July 7, 1933	Area 1:					
	 Similar conditions as previous photograph. Dark elongated area noted in last photo does not appear. 					
	Area 2:					
	 Similar conditions as previous photograph. Dark areas (possibly standing liquids) exist within the southwest corner of the secondary berm. 					
	Areas 3, 4, 5, 6 and 7:					
	Areas appear to be undeveloped and disturbed (dirt and vegetative-covered).					
	Area 8					
	• Elongated dark area (possibly standing liquids) along northern boundary with secondary berm.					
February 20, 1937	Area 1:					
	 Similar conditions as previous photograph. Appears to be more vegetation along the western half. Appears to be more standing liquids within the enclosed area (may be rainwater). To the south there appears to be a vegetative-covered bermed area. 					
	Area 2:					
	Reservoir:					
	- Similar conditions as the previous photograph. There appears to be small objects (possibly vehicles) at the 3:00 and 7:00 positions of the reservoir berm.					
	Area Outside Reservoir:					
	 Similar conditions as previous photograph. There are more dark areas (possibly standing liquids) within the secondary berm along the east boundary and at the northeast corner. Large towers appear at each corner of the secondary berm. 					
	Area 3:					
	 There appears to be an earthen (dirt) berm around the boundary. Area within the berm is disturbed dirt. 					
	Area 4:					
	 Similar conditions as Area 3. A large light shaded area (possible standing liquids) is covering most of the area. 					
	Area 5:					
	Similar conditions as Area 3.					
	Area 6:					
	 Similar conditions as Area 3. Appears to be a dark area (possible standing liquids) in the northwest corner of area. 					
	Area 7:					
	Soil stockpiles are observed in the northwest corner of area. Majority of the area is disturbed dirt.					
	Area 8:					
	 Area appears to be bordered to the north by an earthen (dirt) berm. Appears to be a dark area along the northern boundary (possibly standing liquids). The majority of the area is disturbed dirt. 					

REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 3 of 7

DATE	PHOTOGRAPH DESCRIPTION				
January 1, 1945	Area 1:				
	 Area appears to have an increase in vegetation. Dark shaded area (possibly standing liquids) no longer exists. A small light shaded area is located in the southeast corner of enclosed area. Appears to be a u-shaped object (possible dirt berm) in the southwest corner of Area 1. Smaller objects appear close to the circular object. A trench (possible pipeline) is observed extending east to west at central portion of Area 1. 				
	Area 2:				
	Reservoir:				
	 Cover no longer exists. Reservoir appears to be concrete lined and in good condition. A dark shaded area (possibly standing liquids) is within the reservoir. 				
	Area Outside Reservoir:				
	 Dark shaded areas no longer exist within the secondary berm. Towers no longer exist. Sparse vegetation. 				
	Area 3: • Similar conditions as previous photograph.				
	Area 4:				
	 Similar conditions as previous photograph. Eastern boundary of dirt berm does not appear to exist. Dark shaded area appears along the southern boundary. A small light shaded area (possibly standing liquids) is observed along the northern boundary. 				
	Area 5:				
	 Similar conditions as previous photograph. Dirt is pushed into stockpiles along eastern boundary. Berm does not appear to exist along eastern boundary. 				
1	Area 6:				
	 Darker shaded area no longer exists. Dirt is pushed into stockpiles along eastern boundary. Eastern boundary of berm does not appear to exist. Appears to be trees and/or bushes within the area. 				
	Area 7:				
	 Appears to be a dark elongated depressed area (possibly liquids within the depression) in central portion of area. Small structure (possibly a building) exists in southeast corner. Remainder of area is disturbed ground. 				
	Area 8:				
	Similar conditions as previous photograph. Dark shaded area no longer exist.				
February 8, 1949	Quality of photograph is poor. Appears to be similar conditions in all areas as previous photograph. Area 4 appears to have an increase in dark shaded area. Area 6 appears to have a small dark shaded area.				
October 19, 1953	Area 1:				
	• Area to the north is disturbed dirt-covered with structures (possibly cement plant) and small objects (possibly vehicles). Central portion appears to be dirt and vegetative-covered. Southern portion has a large tower (possibly oil well) at a similar location where the circular-shaped object was observed in the 1945 photograph. To the north of the tower there appears to be a small elongated depression (possibly trench extending east to west) and a small dark area to the east of the trench (possibly standing liquids). Fence line no longer exists in photograph. To the south of the tower there appears to be five large structures (possibly industrial/commercial buildings) surrounded by parking areas. Areas in front of two of the structures, along Santa Fe Springs Road are dark shaded (possibly vegetation). Small objects (possibly vehicles) are observed in the parking areas around the structure.				

REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

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Page	4	α	,

DATE	PHOTOGRAPH DESCRIPTION					
October 19, 1953	Area 2:					
(Continued)	Reservoir:					
	- The 3:00 and 6:00 positions of the reservoir berm appear to be dirt roads for access to the top of the berm. There appears to be material being pushed into the reservoir from the south to the north. Dark shaded areas (possible standing liquids) are observed at the 1:00 and 9:00 positions within the reservoir. There appears to be sparse vegetation on the reservoir berm.					
	Area Outside Reservoir:					
	- Appears to be dark shaded zones (possibly standing liquids) throughout the area. These zones are contained within the secondary berm. The secondary berm to the south appears to be used as an access road to the reservoir berm from the Los Nietos Road. The secondary berm along the east boundary appears to be removed from the eastern boundaries of Areas 4 and 5. Two small circular objects (possibly aboveground storage tanks [ASTs]) are located in that area. One circular object is enclosed by a dirt berm.					
	Areas 3, 4, 5 and 6:					
	 Earthen (dirt) berms no longer exist. Areas appear to be dirt and vegetative-covered with possible dirt stockpiles. Area appears to be graded with smaller objects (possibly vehicles) extending along boundaries of Areas 5 and 6. Greenleaf Avenue exists in the photograph. 					
	Area 7:					
	 Some (about 15) small structures (quonset huts) and small objects (possibly vehicles) are observed along the eastern boundary (Greenleaf Avenue) and southern boundary (Los Nietos Avenue). The remaining portion of the area is dirt-covered and possibly used for parking. Two circular shapes (possibly ASTs) are observed along eastern boundary. 					
	Area 8:					
	 Six small structures (possibly buildings) appear along the southern portion of the area. There appears to be seven small circular structures (possibly ASTs) observed along the northern boundary of the area. Five of the circular objects appear to be enclosed by a dirt berm. The remaining portion appears to be dirt and vegetative-covered with possible dirt stockpiles and graded areas. 					
September 8, 1958	Area 1:					
	 Area to the north appears to be similar conditions as previous photograph. Central portion remains dirt and vegetative-covered (disturbed). Dark shaded area (possibly standing liquids) appears along the eastern boundary. Appears to be a dirt access road to the reservoir at the central portion of boundary. Trenches no longer visible. Southern portion of area is similar to previous photograph. 					
	Area 2					
	Reservoir:					
	 Entire reservoir is dark shaded (possibly standing liquids), with the exception of the southern portion where fill dirt appears to be "pushed" into the reservoir. Berm appears to remain intact except in the southern area where fill material is pushed over the berm into the reservoir. 					
	Area Outside Reservoir:					
	 Area in the northwest corner appears to be dark shaded (possibly standing liquids). Small dark shaded area outside the reservoir at the 9:00 position. Elongated dark shaded area to the south of the reservoir. Remaining area appears to be disturbed and dirt covered. Circular objects to the east no longer exist. Eastern and southern berm boundaries no longer exist. 					
	Area 3:					
	Similar conditions as previous photograph.					
	Area 4: • Graded with several small objects (possibly vehicles). Appears to be used for parking.					
	Chades with several small objects (possibly vehicles). Appears to be used for parking.					

REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 5 of 7

DATE	PHOTOGRAPH DESCRIPTION					
September 8, 1958	Area 5:					
(Continued)	Area appears to be graded and covered with vegetation.					
	Areas 6 and 7:					
	 Additional small structures (quonset huts) to previous photograph. Remaining area is dirt covered and used for parking. 					
	Area 8:					
	 Additional small objects (possibly vehicles and miscellaneous debris) are observed in the area. Three circular objects (possibly ASTs) appear in the northwest corner of area. A total of five possible ASTs are observed in the area. The five ASTs in the northeast corner no longer exist. 					
November 20, 1962	Area 1:					
	 Additional large structures (possibly buildings/warehouses) are observed in the central portion of area. Dark shaded area to the south of structure (possibly asphalt). Dark shaded area (possible standing liquids) no longer exists on the eastern boundary. Tower (possibly oil well) no longer exists. Remaining area is similar to previous photograph. 					
	Area 2:					
	Reservoir:					
	 Appears to be dirt-covered with the exception of a small dark shaded area in the northern portion. Berm no longer is visible. Appear to be dirt stockpiles at the 4:00 position. Entire reservoir area is being graded. 					
	Area Outside Reservoir:					
	 Appear to be dirt stockpiles along the eastern boundary. Dark elongated area no longer exists to the south. Dark shaded area to the north of the reservoir. 					
	Area 3:					
	Similar conditions as previous photograph.					
	Area 4:					
	 Parking lot no longer exists. Dirt and vegetative covered. Four large structures (possibly buildings/warehouses) appear along southern boundary. 					
	Area 5:					
	One large structure observed in area. Same location as existing Brothers building.					
	Areas 6, 7, and 8:					
	 Similar conditions as previous photograph. Thirty-four total structures with small objects (possibly vehicles) are observed in Areas 6 and 7. Eastern portion of Area 8 appears to be graded. 					
February 28, 1963	Areas 1, 4, 5, 6, 7, and 8:					
	Similar conditions as previous photograph.					
	Area 2:					
	Reservoir:					
	- Reservoir appears to be covered with dirt and vegetation. No evidence of dark shaded areas.					
	Area Outside Reservoir:					
	- Appears to be an earthen (dirt) berm along the western, northern and eastern boundaries.					
	Area 3:					
	• Similar conditions as previous photograph. Appears to be a dirt road from Greenleaf Avenue to Area 2.					

REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 6 of 7

DATE	Page 6 of 7 PHOTOGRAPH DESCRIPTION				
September 23, 1968	Area 1:				
September 23, 1700	Similar conditions as previous photograph. Additional structures (possibly buildings) in the northern portion of the area. Central portion appears to be graded with several small objects (possibly used for commercial purposes).				
	Area 2:				
	 Reservoir and area outside reservoir appear to be dirt covered and graded. Small objects (possibly buildings and vehicles) appear in the southeast portion of area. 				
	Areas 3 and 4:				
	Areas appear to be dirt covered and graded. Structures no longer exist in Area 4.				
	Areas 5, 6 and 7				
	Similar conditions as previous photograph.				
	Area 8:				
	 Similar conditions as previous photograph. New structures appear in the central and eastern portion of the area. Only two circular-shaped objects (possibly ASTs) exist in the northwest portion of the area. 				
October 30, 1972	Areas 1, 2, 3, 4, 5, 6, 7 and 8				
	Similar conditions as previous photograph.				
October 27, 1983	Area 1:				
	Appears to represent current conditions.				
	Area 2:				
	Reservoir:				
	 Grass and dirt-covered. Appears to be a paved parking area in the northwest corner (RV Storage Lot). 				
	Area Outside Reservoir:				
	 Similar conditions as previous photograph. Increase in vegetation. Appear to be soil stockpiles disturbed dirt and possibly dozer tracks in the southwest area. Appears to be paved parking area in the northwest portion of area (RV Storage Lot). Southeast area appears to be used for storage (possibly lumber). Small structures appears to the south of reservoir. Remainder portion of area is dirt roads and disturbed ground. 				
	Areas 3 and 4:				
	Similar conditions as previous photograph (increase in vegetation).				
	Area 5:				
	 Similar conditions as previous photograph. Appears to be five circular-shaped objects (possibly ASTs). 				
	Area 6:				
	 Appears to be several small circular objects (possibly 55-gallon drums) in the northwest portion of area. Possibly used for storage (lumber). 				
	Area 7:				
	Similar conditions as previous photograph.				
	Area 8:				
	 Similar conditions as previous photograph. Appears to be several circular-shaped objects (possibly 55-gallon drums) in the northwest corner of area. 				
February 10, 1985	Areas 1, 2, 3, 4, 5, 6, 7 and 8:				
	 Poor quality photograph. Appears to be similar conditions as previous photograph. 				

REVIEW OF HISTORICAL AERIAL PHOTOGRAPHS WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

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DATE	PHOTOGRAPH DESCRIPTION
November 20, 1987	Area 1, 3, 4, 5 and 7:
	Similar conditions as previous photograph.
	Area 2:
	 Southern portion of area appears to be graded (dirt covered) and used for storage and parking. Several small objects (possibly vehicles) in the area. Lumber and small structure still exist. Northern portion of area remains vegetative covered with possible graded areas.
	Area 6:
	Similar conditions as previous photograph. Circular objects (possibly 55-gallon drums) no longer exist.
	Area 8:
	Circular-objects (possibly drums and three ASTs) no longer exist in the northwest corner of area.
August 5, 1998	Areas 1, 5, 6, 7 and 8:
	Areas represent current conditions.
	Area 2:
	 Appears to be dirt and vegetative covered. Several circular-objects (55-gallon drums) located in the reservoir area. Lumber storage and vehicles no longer exist.
	Areas 3 and 4:
	Areas appear to be vegetative covered and undeveloped.

94-256/ReDcInSuRe(Rev.1 New) (8/13/99/mc)

SUMMARY OF PREVIOUS STUDIES RELEVANT TO THE WDI SITE(1) WASTE DISPOSAL INC., SUPERFUND SITE

Page 1 of 2

CONDUCTED BY	AREA OF STUDY	DATE	PURPOSE	RESULTS
Advanced Foundation Engineering, Inc.	Southwest of Reservoir Near Los Nietos Road	1971	To conduct a geotechnical evaluation of the site.	Soil investigations indicated that the site's underlying geology consisted of fill material (0-3 feet), clayey silt and silty clay (3-15 feet), and sandy soil (15-20 feet).
Hammond Soil Engineering	Southwest of Reservoir Near Los Nietos Road	1975	To conduct a geotechnical evaluation of the site.	Fill and soil investigations indicated that the site was underlain by sandy silt and clay with some deleterious material and oil contaminated soil in the northern area (0-7.5 feet), central area (0-8.5 feet), and southern area (0-15 feet).
Moore and Tabor	Northeast Corner of Greenleaf Avenue and Los Nietos Road (Campbell Property)	1981	To conduct a foundation investigation.	Soil investigations indicated that the site was underlain by loose fill consisting of silty sand or clayey silt (1-5 feet) and alluvial deposits consisting of interbedded, moderately dense, fine to medium silty sandy and soft to very soft clayey and sandy silt (5-16 feet).
Dames and Moore	The WDI Reservoir and the Campbell Property Areas	1984	To conduct Phase I remedial investigations.	Four soil borings were drilled and soil samples were collected and analyzed. boring logs indicated that the site was covered by 4 to 9 feet of fill material underlain by a mixture of clay, silt, and sand to the depth of about 20 feet. Metal concentrations above STLC were found in soil samples. Semivolatile organics were also detected in several samples.
Dames and Moore	The WDI Reservoir and the Adjacent Athletic Field	1985	To conduct Phase II remedial investigations.	Field investigations included installation and sampling of three monitoring wells in the reservoir area and collection of 35 shallow soil samples from locations around the site. According to the boring logs, the site's geology consisted of clay-silt-sand mixture of varying distributions (70 to 25 feet) and sandy-silt and fine to medium grained sand (25-70 feet). A boring log from a waste handling area indicated that the site was underlain by fill material (0-3 feet), mixture (14-22 feet) followed by fine to medium grained sand. Ground water samples did not show contamination by CAM metals and EPA priority pollutants. Lead concentrations above STLC were detected in several soil samples but similar to background concentrations. No detectable concentrations of priority pollutants were found.
Dames and Moore	Toxo Spray Dust, Inc.	1986	To conduct remedial investigations.	Soil and subsurface gas samples were collected and analyzed. The site was found to be contaminated by pesticide compounds. As a result, the Toxo Spray Dust building and 16 cubic yards of soils were removed and transported to a Class I landfill. Methane and nonmethane gases also appeared to be present at the site.

⁽¹⁾ EBASCO, Remedial Investigation, 1989d.



SUMMARY OF PREVIOUS STUDIES RELEVANT TO THE WDI SITE(1) WASTE DISPOSAL INC., SUPERFUND SITE (Continued)

Page 2 of 2

CONDUCTED BY	AREA OF STUDY	DATE	PURPOSE	RESULTS
Dames and Moore	Campbell Property	1986	To conduct remedial investigations; to locate and estimate the volume of waste handling areas.	Soil and soil-gas investigations and CPT (Cone Penetrometer Test) soundings were conducted. Moderate levels of semivolatile organics were found in soil samples. Analysis of soil-gas samples indicated the presence of methane and nonmethane gases. Results of CPT data were used to estimate volume of waste handling materials.
John L. Hunter and Associates	Campbell Property	1987	To conduct soil sampling following unauthorized waste discharge.	Four soil samples were collected at waste discharge areas. Metal concentrations in the soil samples were below TTLC limits. The STLC of samples was exceeded for several metals. Nitrate concentration varied from 9 to 3,990 ppm.
Ebasco	Reservoir Area, Campbell Property, Toxo Spray Dust Property, and Adjoining Properties	1989	Remedial Investigation	100 soil borings performed, 5 high volume TSP air samples used, 27 round water monitoring wells installed, 26 subsurface gas monitoring wells installed. Air quality onsite was not above background levels. Soils contained metals, volatile organics, semivolatile organics, pesticides/PCBs, in concentrations above background levels. Subsurface organic gases were found. Volatile organics, semivolatile organics, and metals were found in ground water.
Environmental Protection Agency	11 Ground Water Wells	1992	To confirm previous analytical results and increase the database for organic and inorganic parameters in the shallow aquifer at the site.	EPA sampled 11 wells over three quarters in 1992 to verify the levels of contamination in the ground water. The data collected was found to be consistent with previous investigations at WDI with respect to both the hydrology and chemical properties. The presence of volatiles and metals in the shallow aquifer was confirmed.
WDIG	Areas 4 and 7 Soil Conditions, 27 Ground Water Wells, 26 Subsurface Gas Monitoring Wells	1995	Predesign activities were focused on primarily investigating soil conditions in Areas 4 and 7, and confirming earlier EPA soilgas and ground water findings.	The results of the predesign soil chemistry investigations in Areas 4 and 7 indicated that unacceptable risk conditions originally thought to occur at these locations do not actually exist (TRC, 1995). Review of the 4 and 7 sampling and analytical data indicates that: (1) there are no exceedances in Area 4 of ROD Cleanup Standards (using industrial PRGs for Be and T1); and (2) at a 95 percent confidence level there are no exceedances of ROD Cleanup Standards in Area 7.

(1) EBASCO, Remedial Investigation, 1989d.

94-256/ReDeinSuRe(Rev.1 New) (8/13/99/mc)



MAJOR COMPONENTS OF THE 1988 AND 1989 EPA REMEDIAL INVESTIGATION PROGRAM⁽¹⁾ WASTE DISPOSAL, INC. SUPERFUND SITE

COMPONENT	OBJECTIVE	METHOD
Boundary, Topographic, and Location Surveys	 To define site boundaries. To develop a topographic map showing site drainage patterns. To establish location and elevation of various features, soil borings, and monitoring wells, etc. 	Distance and elevations surveys were conducted by a theodolite and electronic distance-measuring device to an accuracy of ± 0.1 feet.
Ambient Air Monitoring	To monitor air temperature, wind direction and particulate matter emissions during field activities.	An air-monitoring tower was installed in the reservoir area. Temperature and wind direction were measured and recorded. Particulate matter concentrations were assessed.
Geophysical Investigation	To locate the concrete reservoir, waste handling areas and underground facilities prior to drilling.	 Electromagnetic (EM) survey was conducted on a 100 x 100 foot grid on the site. Ground penetrating radar (GPR) was used to confirm the data or resolve discrepancies with the EM data. Cone Penetrometer Test (CPT) survey was used to confirm WDI
Soil Investigation	 To estimate the nature and extent of soil contamination. To provide data required for estimating contaminated soil volume. To provide data needed to assess health risks and evaluate transport and fate of contaminants. 	 disposal areas. 108 soil borings were installed to a minimum depth of 35 feet in and around suspected contaminated areas. Lithologic logs of all borings were kept. A minimum of three samples per boring were collected for laboratory analysis. Soil samples were tested with an explosimeter, and OVA and HNu in the field.
Ground Water Investigation	 To estimate the nature and extent of ground water contamination. To define the hydrogeologic conditions at the site. 	 27 borings were converted to ground water monitoring wells. Water levels and several ground water properties were measured and recorded. Ground water samples were collected for laboratory analysis.
Subsurface Gas Investigation	To estimate the nature and extent of subsurface gas contamination.	 26 borings were converted to subsurface gas wells. Samples were collected from these monitoring wells for laboratory analysis.

⁽¹⁾ EBASCO, Remedial Investigation, 1989d.

PHYSICAL CHARACTERISTICS OF WDI SUBAREAS⁽¹⁾ WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

		Page 1 of 2
WASTE HANDLING AREA ⁽²⁾	SOIL BORINGS WITHIN AREA	PHYSICAL DESCRIPTION
Reservoir	SB-26, SB-35, SB-37, SB-38, SB-39, SB-47, SB-48, SB-49, SB-57, SB-58, SB-59, SB-107, SB-108	The WDI Reservoir is circular, concrete, approximately 585 feet in diameter. The concrete sides of the reservoir slope inward, and its concrete bottom is from 18-23 feet below ground surface. Surface topography is nearly flat, ranging from 5-10 feet above the rest of the site. Artificial fill material covering the reservoir ranges from 5-15 feet thick. Below the fill material is predominantly "black sludge." Below the base of the reservoir is a few feet of silt underlain by sand. Estimated volumes of waste and fill materials are respectively 174,000 and 58,000 cubic yards.
	SB-21, SB-22, SB-31, SB-32, SB-33, SB-43, SB-44, SB-53, SB-54, SB-63, SB-64, SB-72, SB-73, SB-80, SB-81, SB-92	Rectangular shape in plan view with dimensions of 300 x 1,050 feet. Located along the western border of the site. Topography slopes to the west from 158 to 153 feet above MSL. Stratigraphy below area is characterized by sand and silt with interbedded clays. Fill material ranges from 1-5 feet thick. Aerial photos reveal standing liquids were once presence. Most contaminants are found at the eastern half of the area between 5 and 20 feet below the surface. Approximately 48,000 cubic yards of waste material and 16,500 cubic yards of fill are present.
2		Consists of the areas surrounding and adjacent to the reservoir. Perimeter is 725 x 825 feet. Elevation varies from 165 to 159 feet above MSL. Area has been divided into sections described below. Estimated volumes of waste and fill materials are 150,000 and 54,000 cubic yards.
2	Northwest Corner: SB-9, SB-14, SB-15, SB-23, SB-24, SB-25, SB-34, SB-45	Aerial photos indicate liquid was present. Borings reveal 5-15 feet of fill material. Below the fill material is contaminated material ranging from 5-20 feet below surface.
2	Northeast Corner: SB-18, SB-19, SB-20, SB-40	Aerial photos show standing liquid was present. Borings reveal 5-15 of fill material. Below the fill material is contaminated material ranging from 5-20 feet below surface. Clay layer is 15-20 feet below surface.
2	Southwest Corner: SB-55, SB-66, SB-67	Contains black sludge and some free liquid. Fill material ranges from 5-10 feet thick and is underlain by 10-15 feet of black sludge. North and east sections underlain by a clay bed, south and west sections underlain by sand, silt.
2	Southeast Corner: SB-50, SB-60, SB-68, SB-69	Aerial photos show that standing liquids were present. Fill material ranges from 5-10 feet thick and is underlain by 10-15 feet of contaminated material. Silt is present below the area to 20 feet, which is underlain by sand.
3	SB-13, SB-28	Rectangular shape in plan view with dimensions of 250 x 100 feet. Located at the eastern corner of the site. Borings located on perimeter of area. Area apparently covered with about 10 feet of fill (9,500 cubic yards). Aerial photos show no standing liquid present.

⁽¹⁾ Information taken from Remedial Investigation Report (1989a).

⁽²⁾ See Figure 1-6 for waste handling area locations.

PHYSICAL CHARACTERISTICS OF WDI SUBAREAS(1) WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 2

		Page 2 of 2
WASTE HANDLING AREA ⁽²⁾	SOIL BORINGS WITHIN AREA	PHYSICAL DESCRIPTION
4	SB-29, SB-30, SB-41, SB-42	Roughly rectangular shape in plan view with dimensions of 300 x 220 feet. Located near northwest corner of site. Topography slopes to east from 165 to 154 feet above MSL. Fill material ranges from 5-10 feet thick. Contaminated material is not found at eastern edge of area. Contaminated material ranges from 5-20 feet below surface. Below this area silt and clay grade downward into sand at 25 feet below ground surface. Estimated volumes of waste and fill materials are respectively 34,000 and 9,500 cubic yards.
5	SB-51, SB-52	Rectangular shape in plan view with dimensions of 250 x 125 feet. Located in the center along the eastern boundary of the site. Five feet of artificial fill covers the area. No standing liquids were identified in aerial photos. The area borings contained no visible contamination. Approximately 5,800 cubic yards of fill material cover the area.
6	SB-61, SB-70, SB-71, SB-79	Roughly rectangular shape in plan view with dimensions of 300 x 320 feet. Located toward the southeastern corner of the site. Topography relatively flat varying from 156 to 159 feet above MSL. Fill material from surface to 5 feet, underlain by waste material to 15 feet. Below area is sand and silt. Aerial photos reveal some standing liquid was present. Estimated volumes of waste and fill materials are 12,000 and 11,000 cubic yards respectively.
7	SB-78, SB-90, SB-91	Roughly rectangular shape in plan view with dimensions of 300 x 190 feet. Located in the southeasternmost corner of the site. Graded with no significant topography. Area covered with 5-10 feet of silty clay and rubble fill, which is underlain by 10 feet of contaminated materials (mainly drilling muds). Perimeter borings exhibit no visible signs of contamination. A 1945 aerial photo shows liquid waste present. The contaminated soil is at depths between 10-20 feet and has an estimated volume of waste and fill materials of 3,900 and 5,700 cubic yards respectively.
8	SB-75, SB-76, SB-77, SB-83, SB-84, SB-85, SB-86, SB-87, SB-88, SB-104, SB-105	Rectangular shape in plan view with dimensions of 830 x 300 feet. Occupies southern edge of site. Average elevation range of approximately two feet. Many small businesses cover the area. Generally, fill is 5 feet thick, underlain by waste material 15-20 feet deep. Waste material is underlain by sand and silt down to 50 feet. Southern half of area appears free of contamination. Aerial photos suggest north area contained standing liquid. Approximately 85,000 cubic yards of waste and 36,000 cubic yards of fill are at the area.

94-256/ReDeInSuRe(Rev.1 New)Tbls&Figs (8/13/99/mc)



 ⁽¹⁾ Information taken from Remedial Investigation Report (1989a).
 (2) See Figure 1-6 for waste handling area locations.

TABLE 2.5

SITE GROUND WATER ELEVATIONS
WASTE DISPOSAL, INC. SUPERFUND SITE

	SURFACE					GROUN	D WATER	ELEVATIO	ON (feet abo	ove MSL)				
MONITORING WELL NUMBER	ELEVATION (feet above MSL)	Oct. 88 ⁽¹⁾	Dec. 91 ⁽²⁾	Oct. 88 to Dec. 91 Change	Feb. 92 ⁽²⁾	Dec. 91 to Feb. 92 Change	May 92 ⁽²⁾	Feb. 92 to May 92 Change	Aug. 92 ⁽²	May 92 to Aug. 92 Change	June 95	Aug. 92 to June 95 Change	Sept. 95	June 95 t Sept. 95 Change
GW-01	153.76	106.86	107.52	+0.66	108.26	+0.74	109.72	+1.46	110.58	+0.86	119.97	+9.39	120.21	+0.24
GW-02	149.61	107.41	107.85	+0.44	108.46	+0.61	109.87	+1.41	110.67	+0.80	119.90	+9.23	120.13	+0.23
GW-04	167.01	107.51	107.77	+0.26	108.29	+0.52	109.65	+1.36	110.51	+0.86	119.66	+9.15	119.92	+0.26
GW-07	154.78	106.68	106.80	+0.12	107.40	+0.60	108.71	+1.31	109.45	+0.74	118.62	+9.17	118.75	+0.13
GW-10	154.98	105.68	106.40	+0.72	107.04	+0.64	108.38	+1.34	109.15	+0.77	118.49	+9.34	118.87	+0.38
GW-11	154.91	105.01	105.95	+0.94	106.71	+0.76	107.93	+1.22	108.70	+0.77	118.14	+9.44	118.27	+0.13
GW-23	157.23	97.83	98.65	+0.82	98.99	+0.34	99.59	+0.60	100.05	+0.46	108.39	+8.34	108.47	+0.08
GW-24	157.03	92.63	92.70	+0.07	93.31	+0.61	94.51	+1.20	95.57	+1.06	106.27	+10.70	107.40	+1.13
GW-26	156.29	104.89	105.69	+0.80	106.20	+0.51	107.41	+1.21	108.23	+0.82	116.97	+8.74	117.44	+0.47
GW-28	157.56	103.76	105.26	+1.50	105.75	+0.49	107.02	+1.27	107.76	+0.74	116.58	+8.82	116.95	+0.37
GW-30	157.01	101.61	104.47	+2.86	105.11	+0.64	106.29	+1.18	107.01	+0.72	116.33	+9.32	116.46	+0.13
Average Gro Elevation Cha Monitoring Po	nge Between			+0.84		+0.59		+1.23		+0.78		+9.24		+0.32
Normalized Ye Water Elevat Rate (ion Change			+0.27		+3.54		+4.92		+3.12		+3.26		+1.29

⁽¹⁾ October 1988 water level measurement from final Remedial Investigation Report (EBASCO Services, Inc.), November 1989d.

^{(2) 1991} and 1992 water level measurements from 1992 Ground Water Monitoring Report (EPA) January 1993.

TABLE 3.1

LIQUID LEVELS IN RESERVOIR PIEZOMETERS WASTE DISPOSAL INC., SUPERFUND SITE

			· · · · · · · · · · · · · · · · · · ·
PROBE	DEPTH TO OILY WASTE	DEPTH TO WATER	OILY WASTE THICKNESS
	(ft bgs)	(ft bgs)	(ft)
A4 (s)	0.35	4.44	4.09
A4 (d)	2.03	6.33	4.3
A5	ND	5.19	
A6	0.22	4.74	4.52
A 7	-0.06	3.65	3.71
B4	thin layer	4.52	
B5	emulsion	4.24	
В6	ND	5.4	
В7	ND	4.36	
B8	ND	5.66	
			,
C3	thin layer	3.36	
C4	ND	0.03	
C5	ND	3.18	
C8	ND	3.61	
C9 (s)	ND	4.26	
C9 (d)	4.5	no contact	>5
D3 (s)	ND	3.1	
D3 (d)	2.08	3.28	1.2
D4	3.14	3.79	0.65
D5	4.42	4.47	0.05
D6 (s)	emulsion	3.71	
D6 (d)	ND	3.26	
D7	emulsion	3.03	
D8	emulsion	3.52	
D9	4.45	5.6	1.15
E5	1.75	4.85	3.1
E6	1.37	2.36	0.99
E7	1.8	3.28	1.48
E8	1.31	4.79	3.48
E9	-0.05	3.11	3.16

			· · · · · · · · · · · · · · · · · · ·
PROBE	DEPTH TO OILY WASTE (ft bgs)	DEPTH TO WATER (ft bgs)	OILY WASTE THICKNESS (ft)
F1	emulsion	3.6	
F2	3.75	4.6	0.85
F3 (s)	ND	3.56	
F3 (d)	emulsion	3.69	
F4	4.47	4.67	0.2
F5	4.48	4.54	0.06
F6	emulsion	3.52	
F7	3	no contact	>5
F8	emulsion	3.68	
F9	0.2	4.3	4.1
Gl	3.3	4.52	1.22
G2	3.13	no contact	>5
G3	3.92	no contact	>5
G4	emulsion	3.2	
G5	5.08	6.2	1.12
G6	4.49	4.84	0.35
G7	3.5	no contact	>5
G8	thin layer	2.91	
G9 (s)	ND	2.46	
G9 (d)	emulsion	2.24	
H2	5.31	6.45	1.14
H3 (s)	dry well	dry well	
H3 (d)	thin layer	4.48	
H4	4.17	no contact	>5
Н5	emulsion	3.81	
Н6	emulsion	3.15	
H7	ND	4.21	
Н8	ND	3.82	
I 4	4.26	no contact	>5
I5	3.88	no contact	>5
I6	emulsion	2.76	
17	ND	3.1	

94-256 ReDeInSu (Rev. 1)Tbls&Figs (8/13/99/mc)

Source: Adapted from CDM, 1999c.

ft = feet.

bgs = below ground surface.

s = shallow probe.

d = deep probe.

ND = Not Detected.

TABLE 3.2

SOIL GAS AND INDOOR AIR INTERIM THRESHOLD SCREENING LEVELS FOR CONSTITUENTS OF CONCERN WASTE DISPOSAL, INC. SUPERFUND SITE

COMPOUND	SOIL GAS THRESHOLD VALUE (ppbv)	INDOOR AIR THRESHOLD VALUE (ppbv)	SITE BOUNDARY THRESHOLD VALUE (ppbv)
Acetone	31,200	312.0	15,600
Benzene	200	2.0	100
Carbon Tetrachloride	68	0.68	34
Chloroethane	75,200	752.0	37,600
Chloroform	340	3.4	170
Dibromoethane	6	0.06	3
1,2-Dichloroethane	360	3.6	180
cis-1,2-Dichloroethane	1,860	18.6	930
1,1-Dichloroethane	25,600	356.0	12,800
1,2-Dichloropropane	186	1.86	93
trans-1,2-Dichloroethene	3,680	36.8	1,840
Ethylbenzene	49,000	490.0	24,500
Tetrachloroethene (Perc)	1,064	10.6	532
Toluene	21,200	212.0	10,600
1,1,2-Trichlorethane	440	4.4	220
1,1,1-Trichloroethane	36,800	368.0	18,400
Trichloroethene	822	8.2	411
Vinyl Chloride	25	0.25	12.5
m,p-Xylene	14,280	142.8	7,140
o-Xylene	14,280	142.8	7,140
Methane (%)	5	1.25	1.25

94-256/Rpts/ReDeInSuRe/Tbls&Figs(new) (8/13//99/mc)

Source: CDM Federal Programs Corporation 1999a, Subsurface Gas Contingency Plan Investigation Report, Waste Disposal, Inc. Superfund Site, January 18, 1999.

TABLE 3.3

SUMMARY OF EPA VOLATILE ORGANIC INTERIM THRESHOLD SCREENING LEVEL EXCEEDANCES WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

		VAPO	R WELLS	TEMPORA	ARY PROBES	LOCATIONS
PARAMETER	SOIL GAS THRESHOLD LEVEL (ppbv)	Frequency of Detection	Maximum Concentration (ppbv)	Frequency of Detection	Maximum Concentration (ppbv)	THAT SOIL GAS THRESHOLD LEVELS ARE EXCEEDED
Dichlorofluoromethane		2/81	1.1	0/104	ND	
Chloromethane		14/81	6200E	16/104	14,000	-
Vinyl chloride	25	21/81	1,700	16/104	1,600	VW4, VW8, VW9, VW10, VW14, VW22, MP-1, MP-2, GP9, GP40, GP41, GP78, GP172
Bromomethane	-	0/81	ND	1/104	5	
Chloroethane	75,200	1/81	60J	1/104	238	
1,1-Dichloroethene		9/81	86J	3/104	280	-
Trichlorofluoromethane	_	8/81	60	0/104	ND	-
Acetone	31,200	30/44	6,414B	77/94	29,000B	
Methylene Chloride		18/81	580J	7/104	240	
trans-1,2-Dichloroethene	3,680	7/81	58J	0/104	ND	
1,1-Dichloroethane	25,600	16/81	658	1/104	240	-
cis-1,2-Dichloroethene	1,860	17/81	1,629	9/104	240	-
2-Butanone	_	3/36	89	36/94	6,020B	
Chloroform	340	17/81	820	5/104	8,400	VW18, MP-1, GP12, GP175
1,1,1-Trichloroethane	36,800	18/81	3,100	6/104	1,900E	-
Carbon Tetrachloride	68	1/81	78	0/104	ND	VW8
Benzene	200	41/81	19,000	39/104	31,000E	VW4, VW9, VW10, VW18, VW22, MP-1, MP-2, GP7, GP9, GP12, GP40, GP41, GP48, GP172, GP175, GP186

NA = Not Analyzed

ND = Not Detected

B = Compound detected in the associated laboratory blank

J = Approximate concentration

E = Qualifier defined in validation report

VW = Vapor Well

GP = Gas Probe (Temporary)
MP = Monitoring Probe
-- = Not Applicable



TABLE 3.3

SUMMARY OF EPA VOLATILE ORGANIC INTERIM THRESHOLD SCREENING LEVEL EXCEEDANCES WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 2

		VADO	DAVELLE	TEMPORA	DV DDODEC	Page 2 of 2
PARAMETER	SOIL GAS THRESHOLD LEVEL (ppbv)	Frequency of Detection	Maximum Concentration (ppbv)	Frequency of Detection	Maximum Concentration (ppbv)	LOCATIONS THAT SOIL GAS THRESHOLD LEVELS ARE EXCEEDED
1,2-Dichloroethane	360	7/81	293	6/104	430	GP175
Trichloroethene	822	40/81	2,200	13/104	780	VW22, VW23, MP-2
Bromodichloromethane		4/38	1,183	NA	NA	_
1,2-Dichloropropane	186	4/81	215	2/104	230	VW14, GP78
Toluene	21,200	40/81	17,000	31/104	16,000E	
1,1,2-Trichloroethane	440	1/81	12,0J	0/104	ND	
Dibromochloromethane		1/81	21J	0/94	ND	
Tetrachloroethene	1,064	42/81	1,088	21/104	1,700D	VW23, GP31, GP172
1,2-Dibromoethene (EDB)	6	3/81	285	1/104	140	VW24, MP-1, GP78
Chlorobenzene	_	8/81	300	11/104	160	
Ethylbenzene	49,000	23/81	7,200	29/104	12,000	
m-& p-Xylene	14,280	26/81	23,000	30/104	19,000J	VW9, GP12
o-Xylene	14,280	14/81	7,300	19/104	3,400	
Styrene	_	1/81	201	NA	NA	
1,1,2,2-Tetrachloroethane	_	1/81	0.77	1/104	76	
1.3,5-Trimethylbenzene		6/60	2,700	NA	NA	
1,2,4-Trimethylbenzene		6/37	5,000	NA	NA	
1,3-Dichlorobenzene	_	1/81	0.78	0/104	ND	
1,4-Dichlorobenzene	1	3/81	0.92	8/104	76	
1,2-Dichlorobenzene		8/81	57	10/104	49	<u></u>

94-256/Rpts/ReDeInSuRe/Tbls&Figs(new) (8/13/99/mc)

NA = Not Analyzed ND = Not Detected

B = Compound detected in the associated laboratory blank

J = Approximate concentration

E = Qualifier defined in validation report

VW = Vapor Well

GP = Gas Probe (Temporary)
MP = Monitoring Probe
-- = Not Applicable



TABLE 4.1

GEOTECHNICAL RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE

SAMPLE LOCATION	DEPTH (feet)	LAYER	AIR CONDUCTIVITY (cm/sec)	HYDRAULIC CONDUCTIVITY (cm/sec)	USCS CLASSIFICATION
TS-136	10 - 11	Sump-Like	4.41E - 10	2.70E - 06	SM
	17 - 18	Native	1.59E - 06	5.90E - 07	ML
TS-137	8.5 - 9.2	Sump-Like	4.28E - 07	4.35E - 05	ML
	31.5 - 32.2	Native	4.04E - 04	7.06E - 04	SP
TS-138	11.3 - 12.0	Sump-Like	2.18E - 10	1.98E - 06	SP
	25.1 - 25.8	Native	2.16E - 04	1.07E - 04	SM
TS-139	6.0 - 7.0	Sump-Like	4.19E - 10	2.13E - 06	SM
	14.0 - 15.0	Native	1.14E - 08	4.49E - 06	SP
TS-141	15.0 - 15.6	Sump-Like	4.65E - 07	1.03E - 04	GP/SP
	18.0 - 19.0	Native	2.53E - 09	8.37E - 08	ML
TS-142	11.0 - 12.0	Sump-Like	8.70E - 09	3.33E - 06	SM
	16.0 - 17.0	Native	1.07E - 08	1.63E - 07	ML
TS-148	3.0 - 5.0	Fill	2.34E - 08	1.13E - 07	ML
	10.0 - 12.0	Sump-Like	9.50E - 09	3.07E - 07	ML
TS-25	0 - 3	Fill	1.38E - 06	-	ML
	7 - 10	Sump-Like	3.74E - 09	_	ML
TS-56	2 - 4	Fill	2.24E - 09	_	ML
	12 - 14	Sump-Like	2.13E - 10		ML

94-256/Rpts/ReDelnSuRe Rev. 2 (5/4/01/jb)

-- = Not tested

Note: Preliminary laboratory data; has not undergone rigorous QA/QC or validation. This data and associated interpretations are subject to change.

TABLE 4.1A

SUMMARY OF GEOTECHNICAL LABORATORY DATA WASTE DISPOSAL, INC. SUPERFUND SITE

					· · · · · · · · · · · · · · · · · · ·		Page 1 of 3
SAMPLE NUMBER BORING NO DEPTH	MOISTURE CONTENT	DRY DENSITY		N SIZE %)	DIRECT SHEA	AR STRENGTH	UNCONFINED COMPRESSION STRENGTH
(feet)	(%)	(pcf)	Sand	Silt/Clay	Cohesion (psf)	Friction Angle (degrees)	(psf)
HSA-1-5	19.7	97.5	_	_	_	_	_
HSA-1-10	18.1	103.7	_	_	_	_	-
HSA-1-25	2.2	89.4	_	_	_	_	_
HSA-1-30	12.2	95.9	_	_	_	_	_
HSA-1-35	18.4	110.1	_	_	_	_	-
HSA-1-40	8.9	105.6	_	-	_	_	_
HSA-2-5	12.1	109.3		_	_	_	_
HSA-2-10	_		i –	_	_	_	_
HSA-2-15	_		_	_	-	_	_
HSA-2-20	9.9	98.6	_	_	_	_	
HSA-2-25	_	_	95	7	_	_	
HSA-2-30	6.2	102.3	_	_	_	_	_
HSA-2-35	18.1	99.4		_	-	_	_
HSA-2-40	_	-		_	_	_	-
HSA-3-5	-	-	_		_	-	_
HSA-3-10	_	_	-	_	_	_	
HSA-3-15	16.0	116.3	_	_	_	_	_
HSA-3-20	3.7	95.5	_	_	_	_	_
HSA-3-25	2.2	88.2		_	_	_	_
HSA-3-30	10.2	90.6	_	_	-	_	_
HSA-4-5	44.4	66.2	_	_	_	_	720
HSA-4-10	13.0	120.7	_	_	_	_	
HSA-4-15		_	_	_	_	_	_
HSA-4-20	10.1	98.5	61	39	922	24	_
HSA-4-25	3.4	94.0	_	_	_	_	_
HSA-4-30	10.5	105.1	_	_	_		l -



TABLE 4.1A

SUMMARY OF GEOTECHNICAL LABORATORY DATA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 3

							1 450 2 01 .
SAMPLE NUMBER BORING NO DEPTH	MOISTURE CONTENT			N SIZE %)	DIRECT SHEA	AR STRENGTH	UNCONFINED COMPRESSION
(feet)	(%)	(pcf)	Sand	Silt/Clay	Cohesion (psf)	Friction Angle (degrees)	STRENGTH (psf)
HSA-5-5	_	_	_	-	-	_	_
HSA-5-10	38.3	80.6	_	_		_	403
HSA-5-15	13.1	122.8	-	_	_	_	_
HSA-5-20	-	_	-	_	_	_	-
HSA-5-25	4.8	107.5	-	_	_	_	-
HSA-5-30	17.3	93.7	-	_	_	-	-
HSA-5-35	17.7	103.0	_	_	-	_	_
HSA-5-40	24.0	104.5			_	_	
HSA-6-5	-	-	_	-	-	-	-
HSA-6-10	18.0	103.7	-	_	-		835
HSA-6-15	17.2	110.4	69	31	672	29	_
HSA-6-20	15.1	113.3	_	_	-		-
HSA-6-25	6.2	99.9	-	_	-	-	-
HSA-6-30	-	-	94	6	_	_	-
HSA-6-35		_	<u> </u>		<u></u>		
HSA-7-5	19.2	107.3	-	_	-	_	1,584
HSA-7-10	14.2	121.6	_	_	_	_	_
HSA-7-15	_	_	_	_	-	_	
HSA-7-20	6.4	99.3	_	_	_	_	_
HSA-7-30	16.4	105.4	-	_	-	_	-
HSA-7-35	5.5	97.9	98	2			



TABLE 4.1A

SUMMARY OF GEOTECHNICAL LABORATORY DATA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 3 of 3

SAMPLE NUMBER BORING NO DEPTH	MOISTURE CONTENT			GRAIN SIZE (%)		DIRECT SHEAR STRENGTH		
(feet)	_	(pcf)	Sand	Silt/Clay	Cohesion (psf)	Friction Angle (degrees)	STRENGTH (psf)	
HSA-8-2	_	-	_	_	_	_	_	
HSA-8-4	-	-	_	_	_		_	
HSA-8-6	-	_	_	_	_	_	_	
HSA-8-10	_		_	_	_	_	_	
HSA-8-15	24.6	95.6	-	_	_	-	_	
HSA-8-20	2.9	95.6	_	_	_	_	_	
HSA-8-25	4.5	96.9	_	_	_	_	_	
HSA-8-30	3.1	98.4	_	_	_	_	_	
HSA-8-35			1	_			_	

94-256/Rpt/RD(Rev. 2.0) (5/4/01/rw)



TABLE 4.2

TPH ANALYSES RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE

SAMPLE LOCATION	(r	OCARBON MATRIX ng/kg)
TS-127	23,000	Fill
	970	Sump
	<50_	Native
TS-128	2,900	Fill
	84,000	Sump
	<50	Native
TS-129	<50	Fill
	45,000	Sump
	<50	Native
TS-130	2,900	Fill
	26,000	Sump
TS-131	<50	Fill
TS-136	1,800	Fill
	34,000	Sump
	<50	Native
TS-137	2,400	Fill
	370	Sump
	8,000	Native
TS-138	2,700	Fill
	210	Sump
	<50	Native
TS-139	880	Fill
	2,500	Sump
	<50	Native
TS-140	3,800	Fill
<u> </u>	7,500	Sump
TS-141	21,00	Fill
	16,000	Sump
	690	Native
TS-142	80	Fill
	<50	Sump
	<50	Native

94-256/Rpts/ReDeInSuRe Rev. 2.0 (5/4/01/rw)

Note: Preliminary laboratory data; has not undergone rigorous QA/QC or validation. This data and associated interpretations are subject to change.

Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

			_																							Page	1 of 4
Sample Location	Parcel 21			Parcel 21			Parcel 21	L		Parcel 22			Parcel 22			Parcel 41			Parcel 41			Parcel 22			Parcel 22		
Sample Number	WDI-SB-D	P-2-6		WDI-SB-D	P-2-5		WDI-SB-D	P-2-19)	WDI-SB-D	P-4-6		WDI-SB-D	P-4-15	,	WDI-SB-DI	P-6-8		WDI-SB-D	P-6-20)	WDI-SB-D	P-8-11		WDI-SB-DI	P-8-23	
Sample Type	Fill			Fill			Native	Τ		Native			Native			Fill			Native			Fill			Native		
Sample Depth	6			5			19	<u> </u>		6			15			8			20			11			23		
Sample Date	10/2/00			10/2/00		T	10/2/00	<u> </u>		10/2/00			10/2/00			10/3/00			10/3/00			10/3/00		L	10/3/00		
Laboratory	Del Mar An	alytica	ıl _	Del Mar An	alytical		Del Mar Ar	nalytic	al	Del Mar An	alytical		Del Mar An	alytic	al	Del Mar An	alytical		Del Mar Ar	nalytic	al	Del Mar An	alytical		Del Mar An	alytic	ıl
Lab Sample ID	1330031-01			1JJ0031-02			1JJ0031-03			1JJ0031-04			1330031-05			1JJ0087-01			JJJ0087-02			1JJ0087-03			1JJ0087-04		
Analysis Date				10/5/00			10/5/00	Γ		10/5/00			10/5/00			10/5/00			10/5/00			10/5/00			10/5/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
				mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Total Recoverable Hydrocarbons				2,700		250	5.0	U	5.0	420		5.0	5.0	U	5.0	14,000		300	5.1	İ	5.0	7.0		5.0	5.0	U	5.0
Analysis Date	10/4/00	i					10/4/00			10/5/00			10/4/00			10/4/00			10/4/00			10/4/00			10/4/00	$\overline{}$	
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
	ug/kg						ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
1,1,1-Trichloroethane	2.0	U	2.0		_		2.0	υ	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	ΰ	2.0
1,1.2,2-Tetrachloroethane	2.0	υ	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1,6	υ	1.6	2.0	U	2.0
1,1,2-Trichloroethane	2.0	υ	2.0				2.0	Ü	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
1,1-Dichlorocthane	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	υ	2.0
1,1-Dichloroethene	5.0	U	5.0				5.0	U	5.0	5.6	H,U	5.6	4.1	U	4.1	5.0	υ	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
1,2-Dibromoethane (EDB)	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	υ	2.0	2.0	U	2.0	1.6	υ	1.6	2.0	U	2.0
1,2-Dichloroethane	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
1,2-Dichloropropane	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	υ	2.0	1.6	U	1.6	2.0	U	2.0
2-Butanone (MEK)	10	U	10				10	U	10	11	H,U	11	8.3	U	8.3	10	U	10	10	Ü	10	8.0	U	8.0	10	U	10
2-Hexanone	10	U	10				10	U	10	11	H,U	11	8.3	U	8.3	10	U	10	10	U	10	8.0	U	8.0	10	U	10
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0			T	5.0	U	5.0	5.6	H,U	5.6	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
Acetone	10	U	10			T	10	U	10	- 11	H.U	11	8.3	U	8.3	10	U	10	10	U	10	8.0	υ	8.0	10	U	10
Benzene	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	Ü	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
Bromodichloromethane	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	u	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	υ	2.0
Bromoform	5.0	υ	5.0				5.0	U	5.0	5.6	H.U	5.6	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
Bromomethane	5.0	υ	5.0				5.0	U	5.0	5.6	H,U	5.6	4.1	U	4.1	5.0	U	5.0	5.0	υ	5.0	4.0	U	4.0	5.0	U	5.0
Carbon Disulfide	5.0	U	5.0				5.0	U	5.0	5.6	H,U	5.6	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
Carbon tetrachloride	5.0	U	5.0				5.0	υ	5.0	5.6	H,U	5.6	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
Chlorobenzene	2.0	υ	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	υ	2.0	1.6	U	1.6	2.0	υ	2.0
Chloroethane	5.0	U	5.0				5.0	U	5.0	5.6	H,U	5.6	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
Chloroform	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	Ų	1.7	2.0	U	2.0	2.0	υ	2.0	1.6	U	1.6	2.0	U	2.0
Chloromethane	5.0	υ	5.0			<u> </u>	5.0	U	5.0	5.6	H,U	5.6	4.1	_ <u>U</u>	4.1	5.0	U	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
cis-1,2-Dichloroethene	2.0	U	2.0	.			2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	υ	2.0	1.6	U	1.6	2.0	U	2.0
cis-1,3-Dichloropropene	2.0	υ	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
Dibromochloromethane	2.0	U	2.0	ļ			2.0	υ	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	Ü	2.0	1.6	U	1.6	2.0	υ	2.0
Ethylbenzene	2.0	υ	2.0				2.0	U	2.0	2.2	H.U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
m,p-Xylenes	2.0	U	2.0				2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	υ	2.0	1.6	U	1.6	2.0	U	2.0
Methylene chloride	20	U	_20_				20	U	20	22	H,U	22	17	U	17	20	U	20	20	Ü	20	16	U	16	20	U	20
o-Xylene	2.0	\rightarrow	2.0			1	2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
Styrene	2.0	U	2.0			\perp	2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
Tetrachloroethene	2.0		2.0	L			2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
Toluene	2.0	υ	2.0			1	2.0	υ	2.0	2.2	H,U	2.2	1.7	υ	1.7	2.0	U	2.0	2.0	υ	2.0	1.6	U	1.6	2.0	U	2.0
trans-1,2-Dichloroethene	2.0	U	2.0	ļ		 -	2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	υ	2.0
trans-1.3-Dichloropropene	2.0		2.0			\perp	2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
Trichloroethene	2.0	_	2.0	ļ		ļ	2.0	U	2.0	2.2	H,U	2.2	1.7	U	1.7	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	2.0	U	2.0
Vinyl acetate	5.0	U	5.0				5.0	U	5.0	5.6	H,U	5.6	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.0	U	4.0	5.0	U	5.0
Vinyl chloride	5.0	U	5.0	<u>L</u>			5.0	U	5.0	5.6	H,U	5.6	4.]	υ	4.1	5.0	U]	5.0	5.0	U	5.0	4.0	υ	4.0	5.0	υ	5.0

Notes:

H = Sample analysis performed past method-specified holding time.

H1 = Sample analysis performed past the method-specified holding time per client's request.

RL-2 = Reporting limit raised due to high concentrations of hydrocarbons.

U = Constituent not detected above laboratory's reporting limits.



Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

mg/kg																										Pag	ge 2 of 4
Water Native Native Native Native Native Real Rea	Parcel 32		L	Parcel 32			Parcel 28			Parcel 28		<u> </u>	Parcel 28		L_	Parcel 28	L	<u> </u>				Parcel 12			Parcel 12		
Total Control Contro	WDI-SB-DF	2-9-7		WDI-SB-DI	-9-20		WDI-SB-DI	P-13-8		WDI-SB-D	PFD-13-8	3	WDI-SB-D	P-13-20		WDI-SB-D	P-16-6	L	WDI-SB-D	P-16-16]	WDI-SB-DI	P-20-10	I _	WDI-SB-DI	PFD-20-10	\top
Decoration Dec	Waste			Native		Γ	Native			Native			Native			Fill			Native			Waste			Waste		
Del Mar Analyses Del Mar Ana	7			20			8			8			20			6			16			10			10		
IDDITION 10/4/00			10/4/00			10/5/00			10/5/00			10/5/00			10/5/00			10/5/00			10/10/00			10/10/00			
	Del Mar Ana	alytical		Del Mar An	alytical	\vdash	Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical	\top
	1JJ0127-01			1JJ0127-02			1JJ0197-01			1JJ0197-02	1		JJJ0197-03			1JJ0197-04			1JJ0197-05			1JJ0315-03		1	1JJ0315-04	-	
mg/kg	10/13/00			10/13/00			10/17/00			10/17/00	_		10/17/00			10/17/00		_	10/17/00						10/17/00		\vdash
mg/kg	Result	Qual	RDL	Result	Oual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Oual	RDL	Result	Qual	RDL
101100 1011000 101100 1011000 1011000 1011000 1011000 1011000 1011000 1011000 1011000 1011000 1011000 1011000 1011000 101100			ļ					 ` 	_	mg/kg	<u> </u>		mg/kg	<u> </u>		mg/kg			mg/kg					 	mg/kg		+-1
Result Qual RDL Result Qual Qual Qual RDL Result Qual Qual Qual RDL Result Qual Qual Qual Qual Qual Qual RDL Result Qual Qual Qual Qual Qual RDL Result Qual Qual Qual RDL Result Qual Qual Qual Qual Qual Qual RDL Result Qual Qual Qual Qual RDL Result Qual Qual Qual Qual RDL Result Qual Qual Qual Qual Qual Qual RDL Result Qual			25		U	5.0		υ	5.0			5.0			5.0		U	5.0		М	5.0			15			57
Revail	10/11/00			10/5/00		-	10/11/00			10/11/00			10/11/00	_		10/11/00	-	_	10/11/00			10/12/00			10/13/00		
20	-	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
20	ug/kg			ug/kg			ug/kg			ug/kg		L	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
20	2.0	U	2.0	1.8	U	1.8	1.7	U	1.7	1.6	U	1.6	1.7	υ	1.7	1.7	U	1.7	1.5	U	1.5	2.0	U	2.0	93	RL-2,U	93
10	2.0	U	2.0	1.8	U	1.8	1.7	U	1.7	1.6	U	1.6	1.7	U	1.7	1.7	U	1.7	1.5	U	1.5	2.0	U	2.0	93	RL-2.U	93
50	2.0	U	2.0	1.8	U	1.8	1.7	U	1.7	1.6	υ	1.6	1.7	U	1.7	1.7	U	1.7	1.5	U	1.5	2.0	U	2.0	93	RL-2,U	93
20	2.0	U	2.0	1.8	U	1.8	1.7	U	1.7	1.6	U	1.6	1.7	υ	1.7	1.7	U	1.7	1.5	U	1.5	2.0	U	2.0	93	RL-2,U	93
20	5.0	U	5.0	4.4	U	4.4	4.1	U	4.1	4.1	υ	4.1	4.3		4.3	4.2		4.2	3.8	U	3.8	5.0	υ_	5.0	230	RL-2,U	230
20	2.0	Ü		1.8	U	1.8	1.7	U	1.7	1.6	υ	1.6	_ 1.7		1.7	1.7		1.7	1.5	U	1.5	2.0	U	2.0	93	RL-2,U	93
10	2.0	U	2.0	1.8	υ	1.8	1.7	υ_	1.7	1.6	U	1.6	1.7	U	1.7	1.7	U	1.7	1.5	U	1.5	2.0	U	2.0	93	RL-2,U	93
Dig Dig Dig Sto Dig Sto Sto Dig Sto Dig Sto Dig Sto Dig Sto Dig 2.0									1.6		-			-							2.0	U	2.0		_ _	93	
50				·								-												—			470
10												_			-												470
20																							U	_			230
2.0	\vdash											$\overline{}$						-									470
5.0	-					-											-	-									93
50						+			_			_						_									93
5.0						_			-															_			230
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2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 U 1.6 U 1.7 U 1.7 1.7 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 5.0 U 5.0 4.4 U 4.4 4.1 U 4.1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td>-</td> <td></td> <td></td> <td>230</td>						_																		-			230
5.0 U 5.0 4.4 U 4.4 4.1 U 4.1 4.1 U 4.3 4.2 U 4.2 3.8 U 3.8 5.0 U 5.0 230 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 5.0 U 5.0 4.4 U 4.4 4.1 U 4.1 4.3 U 4.3 42 U 4.2 3.8 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 2.	\vdash										_	_			_									-			230
2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 5.0 U 5.0 4.4 U 4.4 4.1 U 4.1 4.1 U 4.1 4.3 U 4.2 3.8 U 3.8 5.0 U 5.0 230 RL-2,U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 2.0 U 2.0 1.8 U						_			$\overline{}$			_					-						<u>-</u>				93
5.0 U 5.0 4.4 U 4.4 4.1 U 4.1 4.1 U 4.1 4.3 U 4.3 4.2 U 4.2 3.8 U 3.8 5.0 U 5.0 230 RI-2,U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U									_					_			-				$\overline{}$						93
2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 U 1.6 U 1.6 1.7 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 9.8 2.0 93 RL-2.U 2.0<	\longrightarrow					_			$\overline{}$									$\overline{}$									230
2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 1.7 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 9.8 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.5 U 1.5 2.0<	-								-					_					L		-						93
2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 U 1.6 U 1.6 U 1.7 U 1.7 U 1.7 1.6 U 1.6 U 1.7 U	—								-						_												93
2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.7 U	-			_			-		_			_		_										_			93
2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 U 1.6 U 1.7 U 1.7 1.7 U 1.7 U 1.7 1.6 U 1.6 U 1.6 U 1.6 U 1.7 U <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>——</td><td>_</td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>93</td></t<>								——	_					_													93
20 U 20 18 U 18 17 U 17 16 U 16 17 U 17 17 U 17 15 U 15 20 U 20 930 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 U 1.6 U 1.6 U 1.7 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.7 U 1.5 2.0 U 2.0 93 RL-2.U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 1.7 U 1.7 1.7 U 1.7 1.5 U<	h				U	_			-			-	1.7	_			\rightarrow						U	_	+		93
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2.0 U 2.0 1.8 U 1.8 i.7 U 1.7 1.6 U 1.6 U 1.6 U 1.7 U 1.7 U 1.7 U 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 U 1.7 1.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 2.0 U 2.0 1.8 U 1.8 1.7 U 1.6 U 1.6 I.7 U 1.7 I.7 U 1.7 1.5 U 1.5 2.0 U 2.0 93 RL-2,U 2.0 U 2.0 1.8 I.7 U 1.6 U 1.6 I.7 U 1.7 I.7 U 1.7 I.5 U 1.5 2.0			_		U			·	$\overline{}$									-									93
2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 U 1.6 U 1.7 U	2.0	υ	2.0	1.8	U	+	1.7	U	1.7	1.6	U	1.6	1.7	U	1.7	1.7	U		1.5	U	1.5	2.0	U	2.0		RL-2.U	93
2.0 U 2.0 1.8 U 1.8 1.7 U 1.7 1.6 U 1.6 U 1.6 U 1.6 U 1.7 U 1.5 U 1.5 2.0 U 2.0 93 RL-2,U	<u> </u>				υ	_		U	1.7		U	_	1.7	υ						~							93
2.0 U 2.0 1.8 U 1.8 i.7 U 1.7 1.6 U 1.6 i.7 U 1.7 1.5 U 1.7 i.5 U 1.5 2.0 U 2.0 93 RL-2,U	2.0	U	2.0		U			Ü	1.7	1.6	U		1.7	U				-	1.5	U		2.0	U	-	+		93
┠┈┈ ┈ ╀┈┈┼ ┈╒╋┈┈╎┼┈┩╵┈┈┼┈╎┈┟┈┈┈┼┈╎┈┟┈┢┈┈┈╸ ┼┈┾┈╌┈┼┈┾┈┼┈┈┈┼┈┈┈┼┈┼┈┈┼┈┈┼┈┈┼┈┼ ┈ ╾┼	2.0	U	2.0	1.8	U	1.8	1.7	υ	1.7	1.6	U	1.6	1.7	U	1.7	1.7	υ	1.7	1.5	U	1.5	2.0	U	2.0		RL-2,U	93
	2.0	U	2.0	1.8	υ	1.8	1.7	U	1.7	1.6	υ	1.6	1.7	Ü	1.7	1.7	υ	1.7	1.5	U	1.5	2.0	U	2.0	93	RL-2.U	93
	2.0	U_	2.0	1.8	U		1.7	U	1.7	1.6	U	1.6	1.7	U	1.7	1.7	U	1.7	1.5	U	1.5	2.0	U	2.0		RL-2,U	93
5.0 U 5.0 4.4 U 4.4 4.1 U 4.1 4.1 U 4.1 4.3 U 4.3 4.2 U 4.2 3.8 U 3.8 5.0 U 5.0 230 RL-2.U	5.0	U	5.0	4.4	U	4.4	4.1	U	4.1	4.1	U	4.1	4.3	U	4.3	4.2	U	4.2	3.8	Ū	3.8	5.0	U	5.0	230	RL-2.U	230
5.0 U 5.0 4.4 U 4.4 4.1 U 4.1 4.1 U 4.1 4.3 U 4.3 4.2 U 4.2 3.8 U 3.8 5.0 U 5.0 230 RL-2,U	5.0	U	5.0	4.4	U	4.4	4.1	υ	4.1	4.}	U	4.}	4.3	U	4.3	4.2	U	4.2	3.8	U	3.8	5.0	U	5.0	230	RL-2,U	230

Notes:

H = Sample analysis performed past method-specified holding time.

H1 = Sample analysis performed past the method-specified holding time per

RL-2 = Reporting limit raised due to high concentrations of hydroca

U = Constituent not detected above laboratory's reporting limits.



Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

																						Pa	age 3 of 4
Parcel 12			Parcel 11			Parcel 11			Parcel 11			Parcel 24			Parcel 24			Parcel 30			Parcel 30		
WDI-SB-DI	P-20-2	0	WDI-SB-DI	2-22-3		WDI-SB-DI	P-22-8		WDI-SB-D	PFD-22-8	3	WDI-SB-D	P-24-9)	WDI-SB-D	P-24-15	1	WDI-SB-D	P-25-1	0	WDI-SB-DI	-25-20	
Native			Fill			Waste			Waste			Waste			Native		1	Waste		Γ	Native		
20			3			8			8			9			15			10			20		
10/10/00			10/10/00			10/10/00			10/10/00			10/12/00	T		10/12/00	1		10/12/00			10/12/00		
Del Mar An	alvtica		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar Ar	alytica	al	Del Mar Ar	alytical		Del Mar Ar	alytica	al	Del Mar An	alytical	
1330315-05			1330315-08			1330315-06	<u> </u>		1110315-07	-		1330445-06	Ţ		1330445-07	<u> </u>		1330445-08	T		1330445-09		
10/17/00			10/17/00		_	10/17/00		<u> </u>	10/17/00		_	10/23/00	 		10/23/00			10/23/00			10/23/00		_
Result	Qual	RDL	Result	Qual	RDL	Result	Oual	RDL	Result	Oual	RDL	Result	Qual	RDL	Result	Oual	RDL	Result	Qual	RDL.	Result	Qual	RDL
mg/kg	V		mg/kg	- Q 55:	1.00	mg/kg		1.22	mg/kg	4	1.00	mg/kg	1		mg/kg			mg/kg	4		mg/kg	4	+
2,400		100	80		5.0	100		5.0	190		5.0	1,200		15	5.0	U	5.0	12	 	5.0	5.0	U	5.0
10/12/00		,,,,,	10/12/00		3.0	10/12/00		3.0	10/12/00		-3.0	10/19/00			10/19/00	<u> </u>		10/19/00	 	3.0	10/19/00		+
Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDI.	Result	Qual	RDL	Result	Oual	RDL	Result	Qual	RDL
ug/kg	730.		ug/kg	- 		ug/kg			ug/kg	<u> </u>	1.02	ug/kg	•	-	ug/kg	\		ug/kg	1	-	ug/kg		1
2.0	υ	2.0	1.8	U	1.8	1.8	Ü	1.8	2.0	υ	2.0	2.7	U	2.7	2.0	U	2.0	1.8	υ	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	υ	2.0	2.7	U	2.7	2.0	U	2.0	1.8	υ	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	Ų	1.8	2.0	U	2.0	2.7	U	2.7	2.0	U	2.0	1.8	Ü	1.8	1.8	υ	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2.7	U	2.7	2.0	U	2.0	1.8	U	1.8	1.8	υ	1.8
5.0	U	5.0	4.5	.υ	4.5	4.4	U	4.4	5.0	U	5.0	6.7	U	6.7	5.0	U	5.0	4.4	Ü	4.4	4.4	U	4.4
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2.7	υ	2.7	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2.7	U	2.7_	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	2.4		1.8	3.1		2.0	2.7	U	2.7	2.0	U	2.0	1.8	U	1.8	1.8	υ	1.8
10	U	10	9.0	U	9.0	8.8	υ	8.8	10	U	10	19	<u></u>	13_	10	U	- 10	8.8	U	8.8	8.8	U	8.8
10	U	10	9.0	υ	9.0	8.8	U	8.8	10	U	10	13	U	13	10	U	10	8.8	U	8.8	8.8	U	8.8
5.0	U	5.0	4.5	U	4.5	4.4	U	4.4	5.0	U	5.0	6.9	<u> </u>	6.7	5.0	U	5.0	4.4	U	4.4	4.4	U	4.4
10	U	10	9.0	<u> </u>	9.0	14		8.8	18		10	56		13	10	U	10	8.8	U	8.8	8.8	U	8.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2.7	U	2.7	2.0	U	2.0	1.8	U	1.8	1.8	υ	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2.7	υ	2.7	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
5.0	U	5.0	4.5	U	4.5	4.4	U	4.4	5.0	U	5.0	6.7	U	6,7	5.0	υ	5.0	4.4	U	4.4	4.4	U	4.4
5.0	υ	5.0	4.5	U	4.5	4.4	U	4.4	5.0 5.0	U	5.0	6.7	U	6.7	5.0	U	5.0	4.4	υ	4.4	4,4	U	4.4
5.0 5.0	U	5.0	4.5 4.5	U	4.5	4.4	U	4.4	5.0	U	5.0	6.7	U	6.7	5.0	U	5.0	4.4	U	4.4	4,4	<u>U</u>	4.4
2.0	U	2.0	1.8	U	1.8	2.5		1.8	2.0	U	2.0	2.7	U	2.7	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
5.0	Ü	5.0	4.5	U	4.5	4.4	U	4.4	5.0	U	5.0	6.7	U	6.7	5.0	U	5.0	4.4	U	4.4	4.4	U	4.4
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2,7	U	2.7	2.0	U	2.0	1.8	υ	1.8	1.8	U	1.8
5.0	U	5.0	4.5	U	4.5	4.4	U	4.4	5.0	U	5.0	6.7	Ü	6,7	5.0	U	5.0	4,4	U	4.4	4.4	_	4.4
2.0	Ü	2.0	1.8	- U	1.8	2.3		1.8	2.0	U	2.0	2.7	U	2.7	2.0	U	2.0	1.8	U	1.8	1.8	 U	1.8
2.0	Ü	2.0	1.8	U	1.8	1.8	U	1.8	2.0	Ü	2.0	2.7	Ü	2.7	2.0	U	2.0	1.8	U	1.8	1.8		1.8
2.0	Ü	2.0	1.8	U	1.8	1.8	U	1.8	2.0	ΰ	2.0	2.7	Ü	2.7	2.0	U	2.0	1.8	Ū	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	υ	2.0	2.7	υ	2.7	2.0	U	2.0	1.8	Ū	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	4.2		2.7	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
20	U	20	18	U	18	18	U	18	20	U	20	27	Ū	27	20	U	20	18	U	18	18	U	18
2.0	υ	2.0	1.8	U	1.8	1.8	U	1.8	2.0	υ	2.0	2.7	U	2.7	2.0	υ	2.0	1.8	U	1.8	1.8	U	1.8
2.0	U	2.0	1.8	υ	1.8	1.8	U	1.8	2.0	Ū	2.0	2.7	U	2.7	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
2.0	U	2.0	2.7		1.8	1.8	U	1.8	2.0	U	2.0	2.7	U	2.7	2.0	U	2.0	1.8	υ	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U_	1.8	2.0	υ	2.0	2.9		2.7	2.0	υ	2.0	1.8	U	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2.7	Ü	2.7	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	U	2.0	2.7	υ	2.7	2.0	U	2.0	1.8	υ	1.8	1.8	U	1.8
2.0	U	2.0	1.8	U	1.8	1.8	U	1.8	2.0	υ	2.0	2.7	U	2.7	2.0	U	2.0	1.8	U	1.8	1.8	U	1.8
5.0	U	5.0	4.5	U	4.5	4.4	U	4.4	5.0	U	5.0	6.7	U	6.7	5.0	U	5.0	4.4	U	4.4	4.4	U	4.4
5.0	U	5.0	4.5	υ	4.5	4.4	U	4.4	5.0	U	5.0	6,7	U	6.7	5.0	υ	5.0	4.4	U	4.4	4.4	U	4.4

Notes

- H = Sample analysis performed past method-specified holding time.
- H1 = Sample analysis performed past the method-specified holding time per client's request.
- RL-2 = Reporting limit raised due to high concentrations of hydrocarbons.
- U = Constituent not detected above laboratory's reporting limits.



Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

					<u> </u>						,												Page 4 of 4
Parcel 30			Parcel 30		<u> </u>	Parcel 43			Parcel 43	L	↓	Parcel 43	Ĺ		Parcel 43		ļ	Parcel 43	L	l	Parcel 43	L	
WDI-SB-DF	-27-3		WDI-SB-DI	P-27-15	<u> </u>	WDI-SB-DI	P-29-6		WDI-SB-DI	P-29-20		WDI-SB-D	P-31-5	<u> </u>	WDI-SB-DI	PFD-31-5	ļ	WDI-SB-D	P-31-20)	WDI-SB-DI	P-34-8	
Fill			Native		}	Waste			Native		 	Waste			Waste		 	Native	<u> </u>		Waste		
3			15		ـــــــ	6			20			5	_		5			20	 	 	8		
10/13/00			10/13/00		↓	10/14/00	L	Ļ	10/14/00	ل _{ــــ} ــــ	├ ──	10/14/00		ļ	10/14/00		 	10/14/00	Ļ	Ļ	10/20/00		
Del Mar Ana	lytical		Del Mar An	alytical	 	Del Mar An	alytica	1	Del Mar An	alytical		Del Mar An	alytical	_	Del Mar An	alytical	+	Del Mar Ar	T-	J	Del Mar An	alytical	
IJJ0523-01			IJJ0523-02		<u> </u>	1330531-05			1330531-06	ļ	 	IJJ0 531-07			1330531-08			13.10531-09			1JJ0733-03		├ ──
10/23/00			10/23/00		 	10/25/00	-		10/25/00			1 0 /25/00		200	10/25/00		1001	10/25/00	-	-	11/6/00		
Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
mg/kg			mg/kg		 	mg/kg			mg/kg		-	mg/kg		-	mg/kg		4.2	mg/kg			mg/kg		
1,200		50	9.7		5.0	990	<u> </u>	25	13	<u> </u>	5.0	9.1		5.0	9.1		4.2	94 10/18/00		5.0	34		5.0
10/17/00		201	10/17/00		201	10/17/00	01	DOL	10/17/00	Qual	RDL	1 0 /18/00	Oual	RDL	Result	Oual	RDL		Qual	RDL	11/3/00	Oual	RDL
Result	Qual	RDL	Result	Qual	RDL	Result	Quai	RDL	Result	Quai	KUL	Result	Quai	KDL	 	Quai	KDL	Result	Quar	KDL	Result	Quai	RDL
ug/kg			ug/kg	U	1.6	ug/kg 1.6	υ	1,6	ug/kg 2.0	U	2.0	ug/kg	U	1.6	ug/kg 1.6	U	1.6	ug/kg 1.8	U	1.8	ug/kg 1.6	H1,U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	U	1.6	2.0	- -	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	HIJU	1.6
2.5	- U	2.5	1.6	U	1.6	1.6	υ	1.6	2.0	U	2.0	1,6	U	1.6	1.6	U	1.6	1.8	10	1.8	1.6	HI.U	1.6
2.5	U	2.5	1.6	U	1.6	1,6	U	1.6	2.0	U U	2.0	1.6	U	1.6	1,6	U	1,6	1.8	U	1.8	1.6	H1,U	1.6
6.4	- U	6.4	4.1	U	4.1	4.1	U	4.1	5.0	U	5.0	4.0	U	4.0	4.1	U	4.1	4.5	U	4.5	4.1	HI.U	4.1
2.5	U	2.5	1.6	υ	1.6	1.6	υ	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1,6	H1.U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	U	1.6	2.0	Ü	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	HI,U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	U	1.6	2.0	$\frac{\upsilon}{\upsilon}$	2.0	1.6	υ	1.6	1.6	Ü	1.6	1.8	U	1.8	1.6	H1.U	1,6
13	<u>u</u>	13	8.1	υ	8.1	8.1	U	8.1	10	U	10	7.9	U	7.9	8.1	U	8.1	9.1	\overline{v}	9.1	8.2	HI.U	8.2
13	$\frac{\upsilon}{\upsilon}$	13	8.1	υ	8.1	8.1	ΰ	8.1	10	ΰ	10	7.9	υ	7.9	8.1	U	8.1	9.1	U	9.1	8.2	HILU	8.2
6.4	U	6.4	4.1	U	4.1	4.1	U	4.1	5.0	ti.	5.0	4.0	U –	4.0	4.1	U	4.1	4.5	U	4.5	4.1	HI.U	4.1
13	Ü	13	8.1	U	8.1	8.1	U	8.1	10	U	10	7.9	U	7.9	8.1	U	8.1	9.1	U	9.1	16	HI	8.2
15		2.5	1.6	U	1.6	1.6	υ	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	H1,U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	U	1,6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	H1,U	1.6
6.4	U	6.4	4.1	U	4.1	4.1	U	4.1	5.0	U	5.0	4.0	U	4.0	4.1	U	4.1	4.5	U	4.5	4.1	HI,U	4.1
6.4	U	6,4	4.1	υ	4.1	4.1	U	4.1	5.0	υ	5.0	4.0	υ	4.0	4.1	U	4.1	4.5	U	4.5	4.1	H1,U	4.1
6,4	U	6.4	4.1	U	4.1	4.1	υ	4.1	5.0	U	5.0	4.0	U	4.0	4.1	U	4.1	4.5	U	4.5	4.1	H1.U	4.1
6.4	U	6,4	4.1	U	4.1	4.1	υ	4.1	5.0	υ	5.0	4.0	υ	4.0	4.1	U	4.1	4.5	U	4.5	4.1	HI,U	4.1
2.5	U	2.5	1.6	U	1.6	1.6	υ	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	8.1	1.6	HI,U	1.6
6.4	υ	6.4	4.1	U	4.1	4.1	U	4.1	5.0	U	5.0	4.0	U	4.0	4.1	U	4.1	4.5	U	4.5	4.1	H1,U	4.1
2.5	U	2.5	1.6	U	1.6	1.6	υ	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	H1,U	1.6
6.4	U	6.4	4.1	U	4.1	4.1	U	4.1	5.0	U	5.0	4.0	U	4.0	4.1	U	4.1	4.5	υ	4.5	4.1	HI.U	4.1
2.5	U	2.5	1.6	U	1.6	1.6	U	1.6	2.0	U	2.0	1.6	<u>U</u>	1.6	1.6	U	1.6	1.8	U	1.8	1.6	H1.U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	U	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	HI,U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	U	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	H1.U	1.6
120		2.5	1.6	U	1.6	1.6	U	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	2.2		1.8	1.6	H1.U	1.6
100		2.5	1.6	U	1.6	1.7	U	1.6	2.0	<u>U</u>	2.0	1.6 16	U	1.6	1.6	U U	1.6	1.8	U	1.8	1.6	HI,U HI,U	1.6
25	U	2.5	16	U	1.6	1.6	U	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	HI,U	16
2.9	U	2.5	1.6	U	1.6	1.6	U	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	HI,U HI,U	1.6
2.5	_ U	2.5	1.6	υ	1.6	1.6	บ	1.6	2.0		2.0	1.6	บ	1.6	1.6	U U	1.6	1.8	···U	1.8	1.6	H1,U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	-0	1.6	2.0	U	2.0	1.6	U	1.6	1.6	U	1.6	1.8	Ü	1.8	1.6	HI.U	1.6
2.5	υ	2.5	1.6	U	1.6	1.6	U	1.6	2.0	U	2.0	1.6	U	1.6	1.6	 U	1.6	1.8	U	1.8	1.6	HI,U	1.6
2.5	U	2.5	1.6	U	1.6	1.6	υ	1.6	2.0	U	2.0	1.6	_ U	1.6	1.6	U	1.6	1.8	U	1.8	1.6	H1,U	1.6
2.5	- U	2.5	1.6	U	1.6	1.6	Ü	1.6	2.0	U	2.0	1.6	- U	1.6	1.6	- 0	1.6	1.8	Ü	1.8	1.6	HI.U	1.6
6.4	U	6.4	4.1	U	4.1	4.1	Ü	4.1	5.0	- U	5.0	4.0	- U	4.0	4.1	U	4.1	4.5	U	4.5	4.1	HI,U	4.1
6.4	U	6.4	4.1	U	4.1	4.1	U	4.1	5.0	U	5.0	4.0	- U	4.0	4.1	U U	4.1	4.5	U	4.5	4.1	HI,U	4.1
0.4		0.4	7.1	U			U	7.1	L	U	5.0	7.0	Ų	7.0	7.1	<u> </u>		7.3		ر.•	7.1	111,0	7.1

Notes:

H = Sample analysis performed past method-specified holding time.

H1 = Sample analysis performed past the method-specified holding time per client's reque

RL-2 = Reporting limit raised due to high concentrations of hydrocarbons.

U = Constituent not detected above laboratory's reporting limits.



																										Pa	ge I of 4
Sample Location	Parcel 21			Parcel 21	L	ļ	Parcel 22	L		Parcel 22	l		Parcel 41	L		Parcel 41			Parcel 22	L		Parcel 22	L	ļ	Parcel 32	l	
Sample Number	WDI-SB-DI	P-2-5		WDI-SB-DI	P-2-19	<u> </u>	WDI-SB-D	P-4-6		WDI-SB-D	P-4-15		WDI-SB-DI	P-6-8		WDI-SB-D	P-6-20		WDI-SB-D	P-8-11		WDI-SB-D	P-8-23	↓	WDI-SB-D	P-9-7	L
Sample Type	Fill			Native			Native		<u> </u>	Native	L		Fill			Native			Fill			Native		ļ.,.	Waste		<u> </u>
Sample Depth	5		1	19			6	<u> </u>]	15		<u> </u>	8			20				<u> </u>		23	<u></u>	 	7		L
Sample Date	10/2/00		L	10/2/00			10/2/00	<u> </u>		10/2/00			10/3/00			10/3/00	L		10/3/00	<u> </u>	L	10/3/00	<u> </u>		10/4/00	<u>L</u>	<u> </u>
Laboratory	Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar Ai	nalytical	<u> </u>	Del Mar An	alytical		Del Mar Ar	alytica	<u> </u>	Del Mar An	alytica	al	Del Mar An	alytical		Del Mar An	alytical	L
Lab Sample ID	1JJ0031-02			1330031-03			1330031-04			1330031-05			1330087-01			1330087-02			1330087-03			1330087-04			1330127-01	[
Analysis Date	10/3/00			10/3/00			10/3/00			10/3/00	L		10/5/00			10/4/00			10/5/00			10/5/00			10/11/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg	I .	T
1,2,4-Trichlorobenzene	100	U	100	100	υ	100	5,000	RL-2,U	5,000	100	υ	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	U	100	5.000	RL-2,U	5,000
1,2-Dichlorobenzene	100	U	100	100	U	100	5,000	RL-2.U	5,000	001	U	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
1,3-Dichlorobenzene	100	U	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2.U	5.000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
1,4-Dichlorobenzene	100	U	100	100	υ	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5.000
2,4,5-Trichlorophenol	150	U	150	150	U	150	7,500	RL-2,U	7,500	150	U	150	7,500	RL-2,U	7,500	150	U	150	150	U	150	150	U	150	7,500	RL-2,U	7,500
2,4,6-Trichlorophenol	150	U	150	150	U	150	7,500	RL-2,U	7,500	150	U	150	7,500	RL-2,U	7,500	150	U	150	150	υ	150	150	υ	150	7,500	RL-2.U	7,500
2,4-Dichlorophenol	100	U	100	100	Ū	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2.U	5,000	100	υ	100	100	U	100	100	U	100	5.000	RL-2,U	5,000
2,4-Dinitrophenol	250	U	250	250	U	250	13,000	RL-2.U	13,000	250	υ	250	13,000	RL-2,U	13,000	250	U	250	250	υ	250	250	U	250	13,000	RL-2,U	13.000
2,4-Dinitrotoluene	100	U	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
2,6-Dinitrotolucne	100	U	100	100	U	100	5,000	RL-2,U	5,000	_ 100	U	100	5.000	RL-2.U	5,000	100	U	100	100	υ	100	100	υ	100	5,000	RL-2,U	5,000
2-Chloronaphthalene	100	U	100	100	Ū	100	5,000	RL-2,U	5,000	100	υ	100	5,000		5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
2-Methylnaphthalene	100	υ	100	100	Ū	100	5,000	RL-2,U	5,000	100	Ū	100	5,000		5,000	100	υ	100	_100	υ	100	100	U	100	5.000	RL-2,U	5,000
2-Methylphenol	150	U	150	150	Ü	150	7,500	RL-2,U	7,500	150	U	150	7.500	RL-2,U	7,500	150	U	150	150	U	150	150	U	150	7,500	RL-2,U	7,500
2-Nitroaniline	200	U	200	200	υ	200	10,000	RL-2.U	10,000	200	υ	200	10,000	RL-2,U	10,000	200	U	200	200	U	200	200	υ	200	10,000	RL-2,U	10,000
2-Nitrophenol	100	U	100	100	U	100	5,000	R12,U	5,000	100	U	100	5.000		5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2.U	5,000
3,3-Dichlorobenzidine	500	U	500	500	U	500	25,000	RL-2,U	25,000	500	U	500	25,000	RL-2.U	25,000	500	U	500	500	U	500	500	U	500	25,000	RL-2,U	25,000
4,6-Dmitro-2-methylphenol	250	U	250	250	υ	250	13,000	RL-2,U	13,000	250	U	250	13.000		13,000	250	υ	250	250	υ	250	250	U	250	13,000	RL-2,U	13,000
4-Bromophenyl phenyl ether	150	U	150	150	U	150	7,500	RL-2,U	7,500	150	υ	150	7,500	RL-2.U	7,500	150	U	150	150	U	150	150	U	150	7,500	RL-2,U	7,500
4-Chloro-3-methylphenol	100	U	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2,U	5,000	100	U	100	100	υ	100	100	U	100	5.000	RL-2,U	5,000
4-Chloroaniline	100	U	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2,U	5.000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
4-Chlorophenyl phenyl ether	100	U	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2,U	5,000	100	U	001	100	U	100	100	υ	100	5.000	RL-2,U	5,000
4-Methylphenol	150	U	150	150	U	150	7,500	RL-2,U	7,500	150	U	150	7,500	RL-2.U	7,500	150	υ	150	150	U	150	150	Ü	150	7,500	RL-2,U	7,500
4-Nitroaniline	500	U	500	500	υ	500	25,000	RL-2,U	25.000	500	υ	500	25,000	R12.U	25,000	500	υ	500	500	υ	500	500	υ	500	25.000	RL-2,U	25,000
Acenaphthene	100	υ	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5.000	RL-2,U	5,000	100	υ	100	100	υ	100	100	U	100	5,000	RL-2,U	5,000
Acenaphthylene	100	U	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5.000	RL-2.U	5,000	100	U	100	100	U	100	100	IJ	100	5,000	RL-2,U	5,000
Anthracene	100	U	100	100	U	100	5.000	RL-2,U	5,000	100	U	100	5.000	RL-2,U	5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2.U	5,000
Benzo(a)anthracene	100	U	100	100	U	100	5.000	RL-2,U	5,000	100	Ū	100	5,000	RL-2,U	5.000	100	Ü	100	100	υ	100	100	U	100	5.000	RL-2,U	5,000
Benzo(a)pyrene	200	U	200	200	υ	200	10,000	RL-2,U	10,000	200	U	200	10.000	RL-2,U	10,000	200	ij	200	200	U	200	200	U	200	10,000	RL-2,U	10,000
Benzo(b)fluoranthene	200	U	200	200	U_	200	10,000	RL-2.U	10,000	200	U	200	10,000	RL-2.U	10.000	200	U	200	200	U	200	200	U	200	10.000	RL-2,U	10,000
Benzo(g,h,1)perylene	150	υ	150	150	U_	150	7,500	RL-2,U	7.500	150	U	150	7,500	RL-2,U	7.500	150	U	150	150	U	150	150	U	150	7.500	RL-2,U	7,500
Benzo(k)fluoranthene	200	U	200	200	Ü	200	10,000	RL-2,U	10,000	200	υ	200	10.000	RL-2,U	10,000	200	U	200	200	U	200	200	U	200	10,000	RL-2,U	10,000
Bis(2-chloroethyl)ether	100	U	100	100	U_	100	5,000	RL-2,U	5.000	100	U	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	υ	100	5.000	RL-2,U	5,000
Bis(2-chloroisopropyl)ether	100	U	100	100	U_	100	5,000	RL-2,U	5,000	_100	υ	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	υ	100	5,000	RL-2,U	5,000
Bis(2-ethylhexyl)phthalate	500	٦	500	500	U	500	25,000	RL-2,U	25,000	500	υ	500	25,000	RL-2,U	25,000	500	U	500	500	Ų	500	500	U	500	25,000	RL-2,U	25,000
Butyl benzyl phthalate	500	U	500	500	U	500	25,000	RL-2,U	25,000	500	U	500	25,000	RL-2,U	25,000	500	U	500	500	U	500	500	U	500	25,000	RL-2,U	25,000
Chrysene	100	υ	100	100	υ	100	5,000	RL-2,U	5,000	100	υ	100	5,000	RL-2,U	5,000	100	υ	100	100	υ	100	100	υ	100	5,000	RL-2.U	5,000
Di-n-butyl phthalate	250	U	250	250	U	250	13,000	RL-2,U	13,000	250	U	250			13,000	250	U	250	250	U	250	250	U	250	13,000	RL-2.U	13,000
Di-n-octyl phthalate	500	υ	500	500	U	500	25,000	RL-2,U	25.000	500	U	500			25,000	500	U	500	500	U	500	500	U	500	25,000	RL-2,U	25,000
Dibenz(a,h)anthracene	250	U	250	250	U	250		RL-2,U	13,000	250	U	250		RL-2.U		250	U	250	250	U	250	250	υ	250	13,000	RL-2,U	13.000
Dibenzofuran	100	U	100	100	U	100		RL-2,U	5,000	100	U	100		RL-2,U	5,000	100	υ	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
Dimethyl phthalate	100	U	100	100	υ	100		RL-2,U		100	U	100		RL-2,U		100	U	100	100	U	100	100	υ	100		RL-2,U	
Fluoranthene	100	υ	100	100	υ	100		RL-2,U	5,000	100	U	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
Fluorene	100	υ	100	100	U	100		RL-2,U	5,000	100	U	100		RL-2,U		100	U	100	100	υ	100	100	U	100		RL-2,U	
Indeno(1.2,3-cd)pyrene	200	U	200	200	U	200		RL-2,U	10,000	200	U	200		RL-2,U		200	U	200	200	U	200	200	U	200	10,000	RL-2,U	10,000
Isophorone	100	U	100	100	υ	100		RL-2,U	5,000	100	U	100		RL-2,U		100	U	100	100	υ	100	100	U	100		RL-2,U	
n-Nitroso-di-n-propylamine	150	U	150	150	υ	150		RL-2,U	7,500	150	U	150		RL-2,U		150	U	150	150	U	150	150	υ	150	7,500	RL-2,U	7,500
n-Nitrosodiphenylamine	200	U	200	200	U	200	10,000	RL-2,U	10,000	200	U	200	10,000	RL-2,U	10,000	200	υ	200	200	U	200	200	U	200	10,000	RL-2,U	10,000
Naphthalene	150	υ	150	150	U	150	7,500	RL-2,U		150	Ü	150	7,500	RL-2,U	7,500	150	U	150	150	U	150	150	R,U	150	7,500	RL-2,U	7,500
Nitrobenzene	500	υ	500	500	υ	500	25,000	RL-2,U	25,000	500	υ	500	25,000	R12,U	25,000	500	υ	500	500	υ	500	500	υ	500	25,000	RL-2,U	25,000
Pentachlorophenol	500	υ	500	500	U	500	25,000	RL-2,U	25,000	500	U	500	25,000	RL-2,U	25,000	500	U	500	500	U	500	500	U	500	25,000	RL-2,U	25,000
Phenanthrene	100	υ	100	100	U	100	5,000	RL-2,U	5,000	100	U	100	5,000	RL-2,U	5,000	100	U	100	100	U	100	100	U	100	5,000	RL-2,U	5,000
Phenol	150	U	150	150	U	150	7,500	RL-2,U	7,500	150	U	150		RL-2.U		150	U	150	150	U	150	150	U	150		RL-2,U	
Pyrene	150	U	150	150	U	150	7,500	RL-2,U	7,500	150	υ	150		RL-2,U		150	U	150	150	U	150	150	U	150		RL-2,R,U	
	Notes:																										



Notes:

R = The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.

RL-2 = Reporting limit raised due to high concentrations of hydrocarbons and by a clean-up procedure for Method 418 | which reduces the total hydrocarbon concentration. This procedure results in the loss of semi-volatiles due to a loss of target analytes.

U = Constituent not detected above laboratory's reporting limits.

																										Page	2 of 4
Sample Location	Parcel 32			Parcel 28	1		Parcel 28			Parcel 28			Parcel 28			Parcel 28			Parcel 12		1	Parcel 12			Parcel 12		
Sample Number	WDI-SB-DI	P-9-20		WDI-SB-D	P-13-8		WDI-SB-DI	PFD-13-	8	WDI-SB-D	P-13-20		WDI-SB-D	P-16-6		WDI-SB-D	P-16-16		WDI-SB-D	P-20-10		WDI-SB-DI	PFD-20-10		WDI-SB-DI	P-20-2	0
Sample Type	Native			Native	Π.]	Native			Native		L	Fill			Native			Waste			Wastc			Native		\Box
Sample Depth	20			8			8			20			6			16			10			10			20		
Sample Date	10/4/00			10/5/00	T		10/5/00			10/5/00			10/5/00			10/5/00			10/10/00			10/10/00			10/10/00		
Laboratory	Del Mar An	alytical		Del Mar Ar	nalytical	1	Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytica	.;
Lab Sample ID	1JJ0127-02	-		1330197-01	T	1	1JJ0197-02			1,1,0197-03			1110197-04	[1JJ0197-05			1JJ0315-03		1-	1330315-04			1JJ0315-05		-
Analysis Date	10/11/00			10/11/00		 	10/11/00		_	10/11/00			10/16/00			10/16/00			10/20/00			10/20/00			10/20/00	\Box	
7.0.0,7.7.5.0	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDI	Result	Qual	RDL	Result	Qual	RDI	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDI
	ug/kg	<u></u>		ug/kg	- Qui	1.22	ug/kg	4		ug/kg	_	-	ug/kg			ug/kg			ug/kg		1	ug/kg		11.00	ug/kg	400.1	
1,2,4-Trichlorobenzene	100	U	100	100	111	100	100	U	100	100	U	100	100	U	100	2,500	RL-2.U	2,500	500	RL-2,U	500	1,000	RL-2,U	1.000	200	U	200
1,2-Dichlorobenzene	100	U	100	100	T U	100	100	U	100	100	U	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
1.3-Dichlorobenzene	100	U	100	100	U	100	100	U	100	100	Ü	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2.U	1,000	200	v	200
1,4-Dichlorobenzene	100	U	100	100	U	100	100	U	100	100	Ü	100	100	U	100	2,500	RL-2.U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	υ	200
2,4,5-Trichlorophenol	150	U	150	150	U	150	150	U	150	150	Ü	150	150	U	150	3,800	RL-2,U	3,800	750	RL-2,U	750	1,500	RL-2,U	1,500	300	U	300
	150	U	150	150	U	150	150	U	150	150	U	150	150	U	150	3,800	RL-2,U	3,800	750		+		RL-2.U	1.500		++	300
2,4,6-Trichlorophenol			+		U			U	100	100		$\overline{}$		U	100	2,500	RL-2,U			RL-2,U	750	1,500			300	U	-
2,4-Dichlorophenol	100	U	100	100		100	100		_		U	100	100					2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
2,4-Dinitrophenol	250	U	250	250	U	250	250	U	250	250	U	250	250	U	250	6,300	RL-2,U	6,300	1,300	RL-2,U	1,300	2,500	RL-2,U	2,500	500	U	500
2,4-Dinitrotolucne	100	U	100	100	U	100	100	U	100	100	υ	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2.U	1,000	200	U	200
2,6-Dinitrotoluene	100	U	100	100	U	100	100	U	100	100	U	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
2-Chloronaphthalene	100	U	001	100	U	100	100	U	100	100	U	100	100	U	100	2,500	RL-2.U	2,500	500	RL-2.U	500	1,000	RL-2,U	1,000	200	U	200
2-Methylnaphthalene	100	U	100	100	U	100	001	U	100	100	U	100	100	U	100	2.500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2.U	1,000	250		200
2-Methylphenol	150	U	150	150	U	150	150	U	150	150	U	150	150	U	150	3,800	RL-2,U	3,800	750	RL-2.U	750	1,500	RL-2.U	1,500	300	U	300
2-Nitroaniline	200	U	200	200	U_	200	200	Ü	200	200	_U	200	200	υ	200	5,000	RL-2,U	5,000	000,1	RL-2,U	1,000	2,000	RL-2,U	2,000	400	U	400
2-Nitrophenol	100	U	100	100	U	100	100	U	100	100	U	100	100	U	100	2,500	RL-2.U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	υ	200
3,3-Dichlorobenzidine	500	U	500	500	U	500	500	U	500	500	υ	500	500	U	500	13,000	RL-2,U	13,000	2,500	RL-2,U	2,500	5,000	R12,U	5,000	1,000	U	000,1
4,6-Dinitro-2-methylphenol	250	U	250	250	U	250	250	U	250	250	U	250	250	υ	250	6,300	RL-2,U	6,300	1,300	RL-2,U	1,300	2,500	RL-2,U	2,500	500	U	500
4-Bromophenyl phenyl ether	150	U	150	150	U_	150	150	U	150	150	U	150	150	U	150	3,800	RL-2,U	3,800	750	RL-2.U	750	1,500	RL-2,U	1,500	300	U	300
4-Chloro-3-methylphenol	100	U	100	100	υ_	100	100	U	100	100	U	100	100	U	100	2.500	RL-2.U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
4-Chloroaniline	100	U	100	001	U	100	100	υ	100	100	U	001	100	υ	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
4-Chlorophenyl phenyl ether	100	υ	100	100	U	100	100	U	100	100	υ	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
4-Methylphenol	150	υ	150	150	U	150	150	U	150	150	U	150	150	U	150	3,800	RL-2,U	3,800	750	RL-2,U	750	1.500	RL-2,U	1,500	300	υ	300
4-Nitroaniline	500	U	500	500	U	500	500	υ	500	500	U	500	500	U	500	13,000	RL-2,U	13,000	2,500	RL-2,U	2,500	5,000	RL-2,U	5,000	000,1	U	1,000
Acenaphthene	100	U	100	100	U	100	100	U	100	100	υ	100	100	U	100	2.500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2.U	1,000	200	U	200
Acenaphthylene	100	U	100	100	U	100	100	Ų	100	100	U	100	100	U	100	2,500	RL-2,U	2.500	500	RL-2.U	500	1,000	RL-2,U	1,000	200	U	200
Anthracene	100	U	100	100	U	100	100	υ	100	100	U	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1.000	RL-2,U	1,000	200	U	200
Benzo(a)anthracene	100	U	100	100	U	100	100	U	100	100	U	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
Benzo(a)pyrene	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	5,000	RL-2,U	5,000	1,000	RL-2,U	1,000	2,000	RL-2,U	2,000	400	υ	400
Benzo(b)fluoranthene	200	U	200	200	U	200	200	U	200	200	υ	200	200	υ	200	5,000	RL-2,U	5,000	1,000	RL-2,U	1,000	2,000	RL-2.U	2,000	400	U	400
Benzo(g,h,i)perylene	150	U	150	150	U	150	150	U	150	150	U	150	150	U	150	3,800	RL-2,U	3,800	750	RL-2,U	750	1,500	RL-2,U	1,500	300	U	300
Benzo(k)fluoranthene	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	5,000	RL-2,U	5,000	1,000	RL-2,U	1,000	2,000	RL-2,U	2,000	400	U	400
Bis(2-chloroethyl)ether	100	U	100	100	U	100	100	U	100	100	U	100	100	U	100	2,500	RL-2.U	2,500	500	RL-2,U	500	1,000	RL-2.U	1,000	200	U	200
Bis(2-chloroisopropyl)ether	100	U	100	100	U	100	100	U	100	100	υ	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2,U	1,000	200	U	200
Bis(2-ethylhexyl)phthalate	500	U	500	500	U	500	500	U	500	500	U	500	500	υ	500	13,000	RL-2,U	13,000	2,500	RL-2,U	2,500	5,000	RL-2,U	5,000	1.000	U	1,000
Butyl benzyl phthalate	500	U	500	500	υ	500	500	U	500	500	U	500	500	U	500	13,000	RL-2,U	13,000	2,500	RL-2,U	2,500	5,000		5,000	1,000	υ	1,000
Chrysene	100	U	100	100	υ	100	100	U	100	100	U	100	100	U	100	2,500	RL-2,U	2,500	500	RL-2,U	500	1,000	RL-2.U	1,000	200	_	200
Di-n-butyl phthalate	250	U	250	250	U	250	250	υ	250	250	U	250	250	Ū	250	6,300	RL-2,U	6,300	1.300	RL-2,U	1,300	2,500		2,500	500	Ū	500
Di-n-octyl phthalate	500	Ū	500	500	U	500	500	Ü	500	500	- II	500	500	U	500	13,000	RL-2.U	13,000	2.500	RL-2,U	2.500	5,000	RL-2.U	5,000	1.000	U	1,000
Dibenz(a,h)anthracene	250	Ü	250	250	U	250	250	U	250	250	U	250	250	U	250		RL-2,U		1,300	RL-2,U	1,300	2,500		2,500	500		500
Dibenzofuran	100	υ	100	100	U	100	100	U	100	100	υ	100	100	Ü	100		RL-2,U		500	RL-2,U	500	1,000		1,000	200	$\overline{}$	200
Dimethyl phthalate	100	Ū	100	100	υ	100	100	U	100	100	U	100	100	U	100		RL-2,U		500	RL-2,U	500	1,000		1,000	200		
Fluoranthene	100	U	100	100	U	100	100	U	100	100	U	100	100	U	100		RL-2,U		500	RL-2,U	500	1,000		1,000	200	_	200
Fluorene	100	U	100	100	U	100	100	U	100	100	U	100	100	U	100		RL-2,U		500	RL-2,U	500	1,000		1,000	200	_	200
Indeno(1,2,3-cd)pyrene	200	Ü	200	200	U	200	200	U	200	200	U	200	200	U	200		RL-2,U		1,000	RL-2,U	1,000	2,000		_	400		400
Isophorone	100	U	100	100	U	100	100	U	100		U	100	100	U			RL-2,U				500	1,000		2,000	200		
		U		150		150				100		_			100				500	RL-2,U				1,000	300	_	-
n-Nitroso-di-n-propylamine	150		150		U		150	U	150	150	U	150	150	U	150		RL-2,U		750	RL-2,U	750	1,500		1,500			300
n-Nitrosodiphenylamine	200	U	200	200	U	200	200	U	200	200		200	200	U	200		RL-2.U		1,000	RL-2,U	1,000	2,000		2,000	400		400
Naphthalene	150	U	150	150	U	150	150	U	150	150	U	150	150	U	150		RL-2,U		750	RL-2,U	750	1,500		1,500	300	_	300
Nitrobenzene	500	U	500	500	U	500	500	U	500	500	U	500	500	U	500		RL-2,U		2,500	RL-2,U	2,500	5,000		5,000	1,000	_	1,000
Pentachlorophenol	500	U	500	500	U	500	500	U	500	500	U	500	500	U	500		RL-2,U		2,500	RL-2,U	2,500	5,000		5,000	1,000		1,000
Phenanthrene	100	U	100	100	U	100	001	U	100	100	U	001	100	U	100		RL-2,U		500	RL-2,U_	500	1,000		1,000	200		200
Phenol	150	U	150	150	U	150	150	U	150	150	U	150	150	U	150		RL-2,U		750	RL-2,U	750	1,500		1,500	300		300
Pyrene	150	R,U	150	150	U	150	150	U	150	150	U Í	150	150	υl	150	3,800	RL-2,U	2 000	750	RL-2,U	750	1,500	RL-2,U	1,500	300	υ	300



Notes:

R = The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.

RL-2 = Reporting limit raised due to high concentrations of hydrocarbons and by a clean-up procedure for Method 418.1 which reduces the total hydrocarbon concentration. This procedure results in the loss of semi-volatiles due to a loss of target analytes.

U = Constituent not detected above laboratory's reporting limits.

Semich Newfort Wind School Process Pro																								Pag	ge 3 of 4
Semigle Type	Sample Location	Parcel 11			Parcel 11]		Parcel 11		I	Parcel 24			Parcel 24			Parcel 30			Parcel 30			Parcel 30		
Semple Color 16	Sample Number	WDI-SB-DI	P-22-8	1	WDI-SB-D	PFD-22-8	3	WDI-SB-DI	P-22-3		WDI-SB-D	P-24-9		WDI-SB-DI	P-24-15		WDI-SB-DI	P-25-10		WDI-SB-DI	P-25-20		WDI-SB-DI	P-27-3	,
Sample Depth Sample Corporation 10 10 10 10 10 10 10 1	Sample Type	Waste			Waste			Fill			Waste			Native			Waste			Native			Fill		
Septe Color Colo		8		T	8			3			9			15			10			20			3		
Charlespeed		10/10/00		<u> </u>	10/10/00	† · · ·		10/10/00			10/12/00			10/12/00			10/12/00			10/12/00			10/13/00		\vdash
Company Comp			alvtical	1		alytical			alytical	 		nalytical		Del Mar An	alytical			alytical			alvtical		Del Mar An	alvtica	al
April Column Process Col				 			<u> </u>		Γ΄			, 	_				 								
Part				 																					
Color	Analysis Date		Qual	PDI		Oual	RDI		Qual	RDI		Oual	RDI		Qual	RDI		Oual	BD1	h	Oual	RDI		Qual	RDI
1.24 Epishosbergere 1,000 1,02 1,000			Quai	TRUE		Quai	KDL		- Quan	KDE		7007	N.D.E.		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	10171		Quai	KDL.		Quai	KDE		Quai	KDE
1.5 Declarementary 1.00 10.21 10.00 10.21 10.00 10.21 10.00 10.20	1.2.4 Trichlorobonzono		D1 211	1,000		D1 211	2.000		R1 -2 11	500		R1 - 2 11	1.000		11	100		P1.211	500		11	100		11	2.000
1.5 Debies better 1.60						-				-															
1.4-District Professor 1,000 R. J. 1,000 1,000 R. 2,000 1,000 R. 2,000 1				1								-										_			
2.45 Freinthurghees 1.500 R.J21 1.500 N. 1.500 R. 1.500 N. 1.500												+										_			
2.4. Entirelisemplement 1.000 R.1.2.1 1.000 1.000 R.2.1 1.000																	 			_					
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2.6-Deminostheree 1,000 R.2.01 1,000 R.2.01 1,000 2,000 R.2.01 2,000 300 R.2.01 1,000				+								1		-							_			_	_
2. Emission 2. Emissio				+								+												_	
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2-Metalysinghishiper 1,000 M2,01 1,000 2,000 M2,01 1,000 2,000 M2,01 1,000 1,000 M2,01 1,000 1,000 M2,01 1,000 1,000 M2,01 1						+																_			-
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3.3. Dehenbersentance 5,000 RL-2U 5,000 10,000 RL-2U 1,000 2,500 RL-2U 1,000 1,000 RL-2U 1,000 1,0				_								+							_						
A-Common-ment-free place 5.50 R1-2.1 5.00 S.000 R1-2.1 5.00 R						•						+					 +								
Borneyshepten India 1.50 R. 2.0 1.50 3.00 R. 2.0 3.00 7.9 R. 2.0 3.00 R. 2.0 1.50 1.50 1.50 1.50 1.50 1.50 1.50 0.00 0.00 0.00 4. 2.00 4. 2.00 5.00 R. 2.0 3.00 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 0.00 0.00 0.00 4. 2.00 4. 2.00 4. 2.00 5.00 R. 2.0 3.00 1.50				1								+										_		_	
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## Chloroamine				_						+															
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## Anthrylphenol												+ +													
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Accomplehene				-								 	_												
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Bist2-chlyfneys)pether 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 500 RL-2,U 2,500 5,000 RL-2,U 2,500 5,000 RL-2,U 5,000 5,000 RL-2,U 5,000 0,000 RL-2,U 1,000 1,000 RL-2,U 1,00	<u> </u>									-		$\overline{}$												-	-
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Di-n-octyl phthalate 5,000 RL-2,U 5,000 10,000 RL-2,U 1,000 2,500 RL-2,U 5,000 1,300 RL-2,U 1,300 2,500 RL-2,U 2,500 5,000 RL-2,U 1,300 2,500 RL-2,U 1,300 2,000 RL-2,U 1,300 1,000 RL-2,U 1,000 1,000 RL-2,U 1,0																									
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Dibenzofuran 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 500 RL-2,U 500 1,000 RL-2,U 1,000 100 U 100 500 RL-2,U 500 100 U 100 2,000 U 2,000 U 2,000 Dimethyl phthalate 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 500 RL-2,U 500 1,000 RL-2,U 1,000 100 U 100 500 RL-2,U 500 100 U 100 2,000 U 2,000 U 2,000 RL-2,U 2,000				_																	<u>-</u> +				
Dimethyl phthalate 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 500 RL-2,U 500 1,000 RL-2,U 1,000 100 U 100 500 RL-2,U 500 100 U 100 2,000 U 2,000 U 2,000 RL-2,U																								-	
Fluoranthene 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 500 RL-2,U 500 1,000 RL-2,U 500 1,000 RL-2,U 1,000 100 U 100 500 RL-2,U 500 100 U 100 2,000 U 2,000 U 2,000 RL-2,U 2,000 1,000 RL-2,U 1,000 1,000 1,000 RL-2,U 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,																									
Fluorene 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 4,000 RL-2,U 4,000 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 2,000 RL-2,U 2,000 2,000 RL-2,U 1,000 2,00																									
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Isophorone 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 500 RL-2,U 500 1,000 RL-2,U 1,500 1,000																								 -Ì	
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n-Nitrosodiphenylamine 2,000 RL-2,U 2,000 4,000 I,000 RL-2,U 1,000																									
Naphthalene 1,500 RL-2,U 1,500 RL-2,U 3,000 RL-2,U 750 RL-2,U 1,500 RL-2,U 1,500 RL-2,U 750 1,500 RL-2,U																_					+				
Nitrobenzene 5,000 RL-2,U 5,000 10,000 RL-2,U 10,000 2,500 RL-2,U 2,500 5,000 RL-2,U 2,500 5,000 RL-2,U 5,000 500 U 500 10,000 U 10,000 U 10,000 Pentachlorophenol 5,000 RL-2,U 1,000 2,000 RL-2,U 1,000 2,500 RL-2,U 2,500 5,000 U 500 U																								υ	
Pentachlorophenol 5,000 RL-2,U 5,000 RL-2,U 1,000 RL-2,U 1,000 RL-2,U 1,000 RL-2,U 1,000 RL-2,U 1,000 RL-2,U 5,000 RL-2,U 1,000																						$\overline{}$			
Phenanthrene 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 RL-2,U 500 RL-2,U 1,000 RL-2,U 500 RL-2,U 1,000 RL-2,U 500 RL-2,U 1,500 RL-2,U 1,																									
Phenol 1,500 RL-2,U 1,500 3,000 RL-2,U 3,000 750 RL-2,U 750 1,500 RL-2,U 1,500 150 U 150 750 RL-2,U 750 150 U 150 3,000 U 3,000 U 3,000														500	\rightarrow	500								U	
	Phenanthrene									500				100											
Pyrene 1,500 RL-2,U 1,500 3,000 RL-2,U 3,000 750 RL-2,U 750 1,500 RL-2,U 1,500 150 U 150 750 RL-2,U 750 150 U 150 3,000 U 3,000	Phenol							750	RL-2,U	750				150	U	150	750	RL-2,U		150	U		3,000		
	Pyrene	1,500	RL-2,U	1,500	3,000	RL-2,U	3,000	750	RL-2,U	750	1,500	RL-2,U	1,500	150	U	150	750	RL-2,U	750	150	U	150	3,000	υ	3,000



Notes:

R = The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.

RL-2 = Reporting limit raised due to high concentrations of hydrocarbons and by a clean-up procedure for Method 418.1 which reduces the total hydrocarbon concentration. This procedure results in the loss of semi-volatiles due to a loss of target analytes.

U = Constituent not detected above laboratory's reporting limits.

									_												Page 4 of 4
Sample Location	Parcel 30			Parcel 43			Parcel 43			Parcel 43			Parcel 43			Parcel 43		Γ	Parcel 43		
Sample Number	WDI-SB-DI	P-27-1	5	WDI-SB-DI	P-29-6		WDI-SB-DI	-29-20		WDI-SB-DI	-31-5		WDI-SB-D	PFD-31-5	5	WDI-SB-DI	P-31-20		WDI-SB-D	P-34-8	
Sample Type	Native			Waste			Native			Waste			Waste			Native			Wastc		
Sample Depth	15			6			20			5			5			20			8		
Sample Date	10/13/00			10/14/00			10/14/00	-		10/14/00			10/14/00			10/14/00			10/20/00		
Laboratory	Del Mar An	alytica	91	Del Mar An	alytical		Del Mar An	alytical		Del Mar Ana	lytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical	
Lab Sample ID	1JJ0523-02			1JJ0531-05			1110531-06			1JJ0531-07			1JJ0531-08			1JJ0531-09	ĺ		JJJ0733-03	Ţ	
Analysis Date	10/24/00		 	10/25/00	_		10/25/00			10/25/00			10/25/00			10/25/00			11/9/00	 -	<u> </u>
Analysis Date	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
	ug/kg	Qua.	IGE	ug/kg	Quai	N.D.C	ug/kg	<u> </u>		ug/kg	_ 4		ug/kg	Qu.	1,52	ug/kg	Quai	NO.	ug/kg	Quar.	KDL
1,2,4-Trichlorobenzene	100	U	100	1,000	RL-2,U	1,000	100	U	100	100	U	100	100	U	100	100	U	100	2,000	U	2,000
1,2-Dichlorobenzene	100	υ	100	1,000	RL-2,U		100	U	100	100	U	100	100	υ	100	100	U	100	2,000	U	2,000
1.3-Dichlorobenzene	100	U	100	1,000	RL-2,U		100	Ū	100	100	U	100	100	U	100	100	U	100	2,000	U	2,000
1.4-Dichlorobenzene	100	Ü	100	1,000	RL-2,U	ĺ	100	U	100	100	U	100	100	Ü	100	100	U	100	2,000	U	2,000
2,4,5-Trichlorophenol	150	U	150	1,500	RL-2,U		150	<u> </u>	150	150	U	150	150	U	150	150	U	150	3,000	U	3,000
2,4,6-Trichlorophenol	150	U	150	1,500	RL-2,U		150	Ū	150	150	U	150	150	Ü	150	150	U	150	3,000	Ü	3.000
2,4-Dichlorophenol	100	U	100	1,000	RL-2.U		100	U	100	100	Ū	100	100	υ	100	100	U	100	2,000	U	2,000
2,4-Dinitrophenol	250	U	250	2,500	RL-2,U	_	250	U	250	250	U	250	250	Ü	250	250	U	250	5,000	υ	5.000
2,4-Dinitrophenor	100	U	100	1,000	RL-2,U		100	U	100	100	U	100	100	U	100	100	U	100	2,000	U	2,000
2,4-Dinitrotoluene	100	U	100	1,000	RL-2,U		100	U	100	100	U	100	100	U	100	100	U	100	2,000	U	2,000
2-Chloronaphthalene	100	U	100	1,000	RL-2,U		100	υ	100	100	U	100	100	υ	100	100	U	100	2,000	U	2,000
2-Methylnaphthalene	100	υ	100	1,000	RL-2,U		100	U	100	100	U	100	100	U	100	100	U	100	2,000	U	2,000
2-Methylphenol	150	U	150	1,500	RL-2,U	1,500	150	U	150	150	U	150	150	U	150	150	U	150	3,000	U	3,000
2-Nitroaniline	200	U	200	2,000	RL-2,U		200	U	200	200	- U	200	200	Ü	200	200	U	200	4,000	U	4,000
2-Nitrophenol	100	U	100	1,000	RL-2,U	1,000	100	U	100	100	U	100	100	υ	100	100	U	100	2,000	U.	2,000
3,3-Dichlorobenzidine	500	Ü	500	5,000	RL-2,U		500	U	500	500	U	500	500	υ	500	500	U	500	10,000	Ü	10,000
4,6-Dinitro-2-methylphenol	250	U	250	2,500	RL-2,U		250	_ U _	250	250	U	250	250	U	250	250	U	250	5,000	U	5,000
4-Bromophenyl phenyl ether	150	U	150	1,500	RL-2,U		150	U	150	150	U	150	150	U	150	150	U	150	3,000	U	3,000
4-Chloro-3-methylphenol	100	υ	100	1,000	RL-2,U	1,000	100	U	100	100	U	100	100	υ	100	100	U	100	2,000	Ü	2,000
4-Chloroaniline	100	Ü	100		RL-2,U	1,000	100	U	100	100	- <u>U</u>	100	100	U	100	100	U	100	2,000	U	2,000
4-Chlorophenyl phenyl ether	100	U	100	1,000	RL-2,U	1,000	100	U	100	100	U	100	100	υ	100	100	U U	100	2,000	U	2,000
4-Methylphenol	150	U	150		RL-2,U	1,500	150	U	150	150	Ū	150	150	U	150	150	U	150	3,000	U	3,000
4-Nitroaniline	500	υ	500	5.000	RL-2,U		500	υ	500	500	_ U	500	500	υ	500	500	- U	500	10,000	υ	10.000
Acenaphthene	100	U	100		RL-2,U	1,000	100	U	100	100	Ü	100	100	Ü	100	100	_ U	100	2,000	U	2,000
Acenaphthylene	100	υ	100		RL-2,U		100	U	100	100	υ	100	100	U I	100	100	U	100	2,000	U	2,000
Anthracene	100	U	100		RL-2,U	1,000	100	U	100	100	U	100	100	U	100	100	U	100	2,000	U	2,000
Benzo(a)anthracene	100	υ	100		RL-2,U	_	100	U	100	100	- U	100	100	- Ŭ	100	100	υ	100	2,000	- U	2,000
Benzo(a)pyrene	200	U	200	2,000	RL-2,U	_	200	U	200	200	U	200	200	U	200	200	U	200	4,000	U	4,000
Benzo(b)fluoranthene	200	U	200		RL-2,U		200	Ü	200	200	U	200	200	U I	200	200	Ü	200	4,000	U	4,000
Benzo(g,h,i)perylene	150	U	150		RL-2,U		150	Ü	150	150	- Ŭ	150	150	Ü	150	150	Ü	150	3,000	U I	3,000
Benzo(k)fluoranthene	200	U	200		RL-2,U		200	Ü	200	200	Ü	200	200	U	200	200	U	200	4,000	U	4,000
Bis(2-chloroethyl)ether	100	U	100	1,000	RL-2,U		100	U	100	100	υ	100	100	u	100	100	Ū	100	2,000	U	2,000
Bis(2-chloroisopropyl)ether	100	U	100		RL-2,U		100	υ	100	100	Ū	100	100	U	100	100	- Ŭ	100	2,000	Ü	2,000
Bis(2-ethylhexyl)phthalate	500	U	500	5,000	RL-2,U		500	Ü	500	500	U	500	500	Ü	500	500	Ü	500	10,000	U	10,000
Butyl benzyl phthalate	500	υ	500		RL-2.U		500	U	500	500	$\frac{\upsilon}{\upsilon}$	500	500	υ	500	500	$\frac{\sigma}{\sigma}$	500	10,000	U	10,000
Chrysene	100	U	100	1,000	RL-2.U		100	Ü	100	100	Ū	100	100	U	100	100	U	100	2,000	Ü	2,000
Di-n-butyl phthalate	250	U	250		RL-2,U		250	U	250	250	Ü	250	250	U	250	250	$\frac{\upsilon}{\upsilon}$	250	5,000	u l	5,000
Di-n-octyl phthalate	500	Ü	500		RL-2,U		500	U	500	500	U	500	500	U I	500	500	U	500	10,000	U	10,000
Dibenz(a,h)anthracene	250	υ	250	2,500	RL-2,U		250	U	250	250	U	250	250	U	250	250	$-\frac{\upsilon}{\upsilon}$	250	5,000	U	5,000
Dibenzofuran	100	υ	100		RL-2,U		100	U	100	100	U	100	100	U	100	100	U	100	2,000	U	2,000
Dimethyl phthalate	100	U	100		RL-2,U		100	U	100	100	U	100	100	Ü	100	100	U	100	2,000	U	2,000
Fluoranthene	100	Ü	100		RL-2.U		100	Ü	100	100	U	100	100	U	100	100	- 0	100	2,000	U	2,000
Fluorene	100	υ	100		RL-2,U		100	Ū	100	100	U	100	100	U	100	100	$-\frac{\upsilon}{\upsilon}$	100	2,000	U	2,000
Indeno(1,2,3-cd)pyrene	200	U	200		RL-2.U		200	U	200	200	Ü	200	200	Ü	200	200	U	200	4,000	U	4,000
Isophorone	100	Ü	100		RL-2,U		100	Ū	100	100	U	100	100	- U	100	100	U	100	2,000	U T	2,000
n-Nitroso-di-n-propylamine	150	Ü	150		RL-2,U		150	U	150	150	U	150	150	- 0-	150	150	U	150	3,000	u l	3,000
n-Nitrosodiphenylamine	200	υ	200		RL-2,U		200	$\frac{\overline{\upsilon}}{\upsilon}$	200	200	$\frac{v}{v}$	200	200	U	200	200	υ	200	4,000	u t	4,000
Naphthalene	150	Ū	150		RL-2,U		150	U	150	150	\overline{v}	150	150	U	150	150	Ü	150	3,000	U	3,000
Nitrobenzene	500	Ü	500		RL-2,U		500	U	500	500	u l	500	500	U	500	500	U	500	10,000	" †	10,000
Pentachlorophenol	500	υ	500		RL-2,U		500	U	500	500	U	500	500	U	500	500	U	500	10,000	u †	10,000
Phenanthrene	100	Ü	100		RL-2,U		100	U	100	100	U I	100	100	U	100	100	U	100	2,000	Ü	2,000
Phenol	150	U	150		RL-2,U		150	U	150	150	u	150	150	"	150	150	U	150	3,000	U	3,000
Pyrenc	150	Ü	150		RL-2,U		150	υ	150	150	U	150	150	U	150	150	Ū	150	3,000	υ	3,000
													120		120 1	120					



Notes:

R = The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.

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U = Constituent not detected above laboratory's reporting limits.

Polychlorinated Biphenyls, Pesticides, and Metals Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

Page 1 of 4

Ministry	Cample Landing	Parcel 21		T	Parcel 21	J .	T	Parcel 22		T	D1 22	Т	T	Parcel 41		1	Parcel 41			Parcel 22		1	Parcel 22	F I	
Semiglic Page Fill Semiglic Page Fill Semiglic Page Fill Semiglic Page Semigli	Sample Location		D 2 6	-		D 2 1	<u> </u>		D 4 6	+-	Parcel 22	D A I	<u></u>		D 6 0			D 6 3	<u></u>	+	ND 0 11	 -		D 0 22	<u> </u>
Seryigh Depth			1-2-3			F-2-1	,	+)F-4-0	 		1 -4-1	, —		F-0-0		1	1 -0-2	T	+	1-6-11	 		1-8-23	<u>'</u> ——
Seminor Progress				 		 	-		-			├	 				+		 		 	 			
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Makyshops: 164.00 60.			, 	<u> </u>		nalytic	al .			+			al		nalytical	ļ			cal	+	nalytical				al
Part				 			<u> </u>			ļ		L	↓		ļ	ļ		-	-	• • • • • • • • • • • • • • • • • • • 	<u> </u>	 			
March Marc	Analysis Date	10/4/00					ļ		_	 		ļ				ļ					+			L	acksquare
14.4 Sept		Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
. A. C.DET 1. A. S. D. T. S. D. S. D. L. S. D. S. D. S. D. L. S. D. S. D. L. S. D. S. D. L. S. D. S. D. S. D. L. S. D. S. D. L. S. D. S. D. S. D. S. D. D. S.		ug/kg		<u> </u>	ug/kg									ug/kg		ļ	ug/kg	<u> </u>	ļ	ug/kg		L			
Asternorm 1.50 Miller 1.50 Miller 1.50	4,4'-DDD	250	RL-1,C1,U	250		_	5.0		-	250	5.0		+	130	RL-1,C1,U	130	5.0	U	5.0	5.0	U	5.0		-	
Alderin 2-08 Ri-1,11 250 50 0 5.0 220 U 250 5.0 0 5.0 10 RI-1/CIU 100 5.0 U 5.0	4,4'-DDE	250	RL-1,U	250	5.0	U	5.0	900		250	5.0	U	5.0	130	RL-1,U	130	5.0	U	5.0	5.0	U	5.0	5.0	U	
Specimen (1964)	4,4'-DDT	250	RL-1,C2,U	250	5.0	U	5.0	250	C2,U	250	5.0	U	5.0	130	RL-1,C2,U	130	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Seese-Berl 250 R1-10 250 50 10 150 1250 250 10 250 10 50 150 50 10 50 50 10 50	Aldrin	250	RL-1,U	250	5.0	U	5.0	250	U	250	5.0	U	5.0	130	RL-1,C1,U	130	5.0	U	5.0	5.0	U_U	5.0	5.0	U	5.0
Chipotene 2,500 R1-1, 1/ 2,500 30 1/ 50 2,500 1/ 2,500 1/ 50 1	alpha-BHC	250	RL-1,U	250	5.0	U	5.0	250	U	250	5.0	U	5.0	130	RL-1,C1,U	130	5.0	U	5.0	5.0	Ü	5.0	5.0	U	5.0
Section Sect	beta-BHC	250	RL-1,U	250	5.0	υ	5.0	250	υ	250	5.0	U	5.0	130	RL-1,U	130	5.0	U	5.0	5.0	U_	5.0	5.0	U	5.0
Decident	Chlordane	2,500	RL-1,U	2,500	50	U	50	2,500	υ	2,500	50	U	50	1,300	RL-1.U	1,300	50	U	50	50	U	50	50	U	50
Inflowment 1.70	delta-BHC	500	RL-1,U	500	10	U	10	500	U	500	10	U	10	250	RL-1,C1,U	250	10	U	10	10	U	10	10	U	10
Inflowment 1.70	Dieldrin			250	5.0	U	5.0	250	U	250	5.0	U	5.0	130	RL-1,U	130			5.0	5.0	U	5.0	5.0	υ	5.0
Independent 250 R.L. W. 250 S.D. U 50 C.50 U 520 U 520 U 520 S.D. U 50 S.D. U 50 S.D. U 50 S.D. U V V V V V V V V V	Endosulfan I			+		U	5.0	250	U	250		•	5.0	130	RL-1,U	130	·		5.0	5.0	U	5.0	5.0	U	5.0
Informing marker 500 181-11 1910	Endosulfan II		·			-			U					· · · · · · · · · · · · · · · · · · ·		130		_	+		+				5.0
Findering 1.0 2.0 R.1-JU 2.0 5.0 U 5.0 2.0 U 2.0 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 5.0 Endring indering delay on the presenting of the presental of the presen	Endosulfan sulfate			_			_											_	+		+-	_	-	-	10
Embris alchydys 2.96 RL-1, U 2.90 5.9 U 5.0 2.50 U 2.90 5.0 U 5.0 Embris alchydys 2.90 RL-1, U 2.90 5.0 U 5.0 5	Endrin	+		+					+			_	+				+	+	_			 		1	
Findernic Record 250 RL-1 250 5.0 U 5.0 250 U 50 U 5.0 U 5										+								+	+	+		_		1	
gamma-BHY (Lindane)	Endrin ketone		•	+								+		<u> </u>			t				+	-			
Homesholm 250 R.IJ. 250 5.0 U 5.0 1.50 U 250 5.0 U				+		_			+	+									+		+			_	
Hegesthorsporside 250 R.IJ.U. 250 5.0 U. 5.0 250 U. 250 5.0 U. 5.0 250 C.J.U. 250 5.0 U. 5.0 5.0 U. 5.0 0.0 U	· · · · · · · · · · · · · · · · · · ·			•					+			_	+					-	+	• 	<u> </u>	-			
Methosysholor 250 R.L. C.Z. 250 5.0 U 5.0 250 2.2 250 5.0 U 5.0 5.0				+														_			+				
Total policy 10-00 10-00 10-00 20 10-00 20 10-00 20 10-00 20 10-00 20 20 20 20 20 20 20				+						+		+	+						+	1	+	_		_	
Name 1940 1950 1940 1950 1940									1			_				+			+	}		-	 	-	
Result Qual RCL			KL-1,0	10,000		_	200			10,000			100		10-1,0	3,000		-	200			200		<u> </u>	
NewCoder 1242	Alialysis Date		Oual	BD1		Qual	PDI			BDI			-					<u> </u>	PDI			D D I		Oual	PDI
Arcelor 1016		I CSuit											וחסו	Docult	l Oual										NUL
Arcefor 1221	ı	ua/ka	- X	1		Quu,			Quui	KDL		Qual	RDL		Qual	RDL		Qual	KUL		Quai	KDL	1	Quai	
Arrector 1242	Araclar 1016				ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		50
Avoctor 1242 250 R.1.3,U 250 50 U 50 250 R.1.3,U 250 50 U 50 50 U 50 50 U 50 50	Aroclor 1016	250	RL-3.U	250	ug/kg 50	U	50	ug/kg 250	RL-3.U	250	ug/kg 50	U	50	ug/kg 130	RL-1,U	130	ug/kg 50	U	50	ug/kg 50	U	50	ug/kg 50	U	
Arcocker 1284	Aroclor 1221	250 250	RL-3,U RL-3,U	250 250	ug/kg 50 50	U	50 50	ug/kg 250 250	RL-3,U RL-3,U	250	ug/kg 50 50	U U	50 50	ug/kg 130 130	RL-1,U RL-1,U	130 130	ug/kg 50 50	U	50	ug/kg 50 50	U	50 50	ug/kg 50 50	U U	50
Arcolor 1254	Aroclor 1221 Aroclor 1232	250 250 250	RL-3,U RL-3,U RL-3,U	250 250 250	ug/kg 50 50 50	U U	50 50 50	ug/kg 250 250 250	RL-3,U RL-3,U RL-3,U	250 250 250 250	ug/kg 50 50 50	U U U	50 50 50	ug/kg 130 130 130	RL-1,U RL-1,U RL-1,U	130 130 130	ug/kg 50 50 50	U U U	50 50 50	ug/kg 50 50 50	U U U	50 50 50	ug/kg 50 50 50	U U	50 50
Arcelor 1260 1250 RL-3,U 250 50 U 50 250 RL-3,U 250 50 U 50 104/00 104	Aroclor 1221 Aroclor 1232 Aroclor 1242	250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250	ug/kg 50 50 50 50	U U U	50 50 50 50	ug/kg 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250	ug/kg 50 50 50 50	U U U	50 50 50 50	ug/kg 130 130 130 130	RL-1,U RL-1,U RL-1,U RL-1,U	130 130 130 130	ug/kg 50 50 50 50	U U U U	50 50 50 50	ug/kg 50 50 50 50	U U U	50 50 50 50	ug/kg 50 50 50 50	U U U	50 50 50
Analysis Date 10.400 Result Qual RDL	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248	250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250	ug/kg 50 50 50 50 50	U U U U	50 50 50 50 50	250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250	90 50 50 50 50 50 50	U U U U	50 50 50 50 50	ug/kg 130 130 130 130	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U	130 130 130 130 130	50 50 50 50 50 50	U U U U	50 50 50 50 50	50 50 50 50 50 50	U U U U	50 50 50 50 50	ug/kg 50 50 50 50 50 50	U U U U	50 50 50 50
Result Qual RDL	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50	U U U U U	50 50 50 50 50 50	250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50	U U U U U	50 50 50 50 50 50	ug/kg 130 130 130 130 130	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U	130 130 130 130 130	50 50 50 50 50 50	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50	U U U U U U U U U	50 50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 50	U U U U U	50 50 50 50 50
Muminum May Muminum May Ma	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50	U U U U U	50 50 50 50 50 50	ug/kg 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	90	U U U U U U	50 50 50 50 50 50	ug/kg 130 130 130 130 130 130	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U	130 130 130 130 130	50 50 50 50 50 50 50 50	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 50 50	U U U U U	50 50 50 50 50
Aluminum 14,000 10 8,000 10 12,000 10 16,000 10 13,000 10 20,000 10 33,000 RL-3 20 11,000 10 10 10 10 10 10	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	250 250 250 250 250 250 250 10/4/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 10/4/00	U U U U U U	50 50 50 50 50 50 50	ug/kg 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 130 130 130 130 130 130 130 10/4/00	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U	130 130 130 130 130 130	50 50 50 50 50 50 50 50 50 50 50 50 50 10/4/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 50 10/5/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 50 10/4/00	U U U U U U	50 50 50 50 50 50
Antimony 10 U 10 10 10 U 10 10 10 U 10 10 U 10 10 U	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	250 250 250 250 250 250 250 250 10/4/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result	U U U U U U	50 50 50 50 50 50 50	ug/kg 250 250 250 250 250 250 250 250 250 260 270 280 280 280 280 280 280	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250	50 50 50 50 50 50 50 50 50 10/4/00 Result	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 130 130 130 130 130 130 130 10/4/00 Result	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U	130 130 130 130 130 130	90/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	90/kg 50 50 50 50 50 50 50 50 10/4/00 Result	U U U U U U	50 50 50 50 50 50
Arsenic 2.8 2.0 6.6 2.0 18 2.0 3.6 2.0 3.6 2.0 7.1 2.0 14 2.0 5.8 RL-3 4.0 3.3 2.0 Sarium 130 1.0 96 1.0 2,800 2.0 120 1.0 190 1.0 550 1.0 550 1.0 200 RL-3 2.0 92 1.0 Seryllium 0.50 U 0.50 0.50 U 0.50 0.50 U 0.50 0.50	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date	250 250 250 250 250 250 250 250 10/4/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 50 70/4/00 Result mg/kg	U U U U U U	50 50 50 50 50 50 50 8D	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 RDL	50 50 50 50 50 50 50 50 50 50 50 80 Result mg/kg	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 RDt.	ug/kg 130 130 130 130 130 130 130 10/4/00 Result	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U	130 130 130 130 130 130 130	90/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U	50 50 50 50 50 50 50 RDL	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg	U U U U U U	50 50 50 50 50 50 50
Sarium 130	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum	250 250 250 250 250 250 250 250 10/4/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 RDL	ug/kg 50 50 50 50 50 50 60 60 60 60 60 80 80 80 80 80 80 80	U U U U U U	50 50 50 50 50 50 50 70	ug/kg 250 250 250 250 250 250 250 250 250 Result mg/kg 12,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 RDL	50 50 50 50 50 50 50 50 50 50 50 50 50 80 80 80 80 80 80 80 80 80 80 80 80 80	U U U U U U U	50 50 50 50 50 50 50 RDt.	ug/kg 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 RDL	ug/kg 50 50 50 50 50 50 50 50 50 50 50 60 70 8 csult mg/kg 20,000	U U U U U U U	50 50 50 50 50 50 50 8DL	ug/kg 50 50 50 50 50 50 60 60 60 60 60 80 80 80 80 80 80 80 80 80 80 80 80 80	U U U U U U U U U U U U U U C U C C C C	50 50 50 50 50 50 50 8DL	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U O O O O O O O O O O O O O	50 50 50 50 50 50 50 RDL
Sery	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony	250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 RDL	ug/kg 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U	500 500 500 500 500 500 8DL	ug/kg 250 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12.000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 10	U U U U U U U	50 50 50 50 50 50 50 8DL 10	ug/kg 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 10 RDL	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U	50 50 50 50 50 50 50 FDL	ug/kg 50 50 50 50 50 50 60 60 60 60 80 80 80 80 80 80 80 80 80 80 80 80 80	U U U U U U U Qual RL-3. RL-3.U	50 50 50 50 50 50 50 8DL 20	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U O O O O O O O O O O O O O	50 50 50 50 50 50 70 8DL
Cadmium 0.50 U 0.50 U 0.50 U 0.50 2.2 0.50 0.50 U 0.50 1.1 0.50 0.50 U 0.50 1.0 0.50 1.0 0.50 1.0 0.50 1.0 0.76 1.0 2.4 1.0 1.8 1.0 0.4 1.0 1.0 3.7 1.0 0.0 1.0 <	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic	250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.8	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 10 10	ug/kg 50 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 8,000 10 6.6	U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0	ug/kg 250 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 10 10	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result ing/kg 16,000 3.6	U U U U U U U	50 50 50 50 50 50 50 8DL 10 10	ug/kg 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10,11	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 10 10 10	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U	50 50 50 50 50 50 50 8DL 10 10	ug/kg 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U RL-3	50 50 50 50 50 50 50 8DL 20 4.0	ug/kg 50 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 10 3.3	U U U U U U U O O O O O O O O O O O O O	50 50 50 50 50 50 8DL 10 10
Calcium 3500 15 3,300 15 24,000 15 3,300 15 10,000 15 32,000 15 3,900 RL-3 30 4,100 15 Chromium 22 1,0 13 1,0 67 1,0 24 1,0 27 1,0 31 1,0 39 RL-3 2,0 20 1,0 Jobalt 11 1,0 6.6 1,0 5,0 1,0 7,6 1,0 18 1,0 14 1,0 16 RL-3 2,0 7,1 1,0 ron 19,000 5.0 14,000 5.0 18,000 5.0 20,000 5.0 25,000 5.0 37,000 RL-3 10 17,000 5.0 cead 5.1 2.0 3.3 2,0 320 2.0 5.2 2.0 22 2.0 11 2.0 17,000 10 4,00 10 4,00 10 5,100 10	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium	250 250 250 250 250 250 250 250 0/4/00 Result mg/kg 14,000 2.8 130	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 10 10 10	ug/kg 50 50 50 50 50 50 50 50 50 50 50 60 60 60 60 66 66 66 96	U U U U U U Qual	50 50 50 50 50 50 50 70 8DL 10 2.0	ug/kg 250 250 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 3.6 120	U U U U U U U Qual	50 50 50 50 50 50 50 10 10 2.0	ug/kg 130 130 130 130 130 130 130 130 130 130	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 130 10 10	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U	50 50 50 50 50 50 50 70 8DL 10 10 2.0	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 20 4.0 2.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 3.3 92	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0
Chromium 22 1,0 13 1,0 67 1,0 24 1,0 27 1,0 31 1,0 39 RL-3 2,0 20 1,0	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 2.8 130	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 10 10 10 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 50 50 60 60 60 66 66 60 50 50 60 50 60 60 50 60 60 50 50 60 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0	ug/kg 250 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12.000 18 2,800	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U Qual	50 50 50 50 50 50 50 10 10 2.0 1.0	ug/kg 130 130 130 130 130 130 130 130 130 130	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 130 10 10 10	ug/kg 50 50 50 50 50 50 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U Qual	50 50 50 50 50 50 50 70 8DL 10 10 2.0 1.0	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U Qual RL-3,U RL-3,RL-3,U	50 50 50 50 50 50 50 20 4.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 1.0
Cobalt 11 1.0 6.6 1.0 5.0 1.0 7.6 1.0 18 1.0 14 1.0 16 RL-3 2.0 7.1 1.0 ron 19,000 5.0 14,000 5.0 18,000 5.0 20,000 5.0 22,000 5.0 25,000 5.0 37,000 RL-3 10 17,000 5.0 cad 5.1 2.0 3.3 2.0 320 2.0 5.2 2.0 22,000 5.0 25,000 5.0 37,000 RL-3 10 17,000 5.0 Magnessum 4,800 10 4,800 10 5,100 10 5,200 10 7,400 10 11,000 10 9,300 RL-3 2.0 5,600 10 Manganese 480 1.0 190 1.0 300 1.0 380 1.0 660 1.0 870 1.0 950 RL-3 2.0 2.0 2.0 <	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.8 130 0.50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 60 60 60 666 96 0.50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 2.0 1.0 0.50	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 60 60 10/4/00 Result mg/kg 16,000 3.6 120 0.50	U U U U U U U Qual	50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 10 10 10 10 10 10 50	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 14 550 0.63	U U U U U U Qual	50 50 50 50 50 50 50 10 10 2.0 1.0 0.50	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 8DL 20 4.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50
ron 19,000 5.0 14,000 5.0 18,000 5.0 20,000 5.0 22,000 5.0 25,000 5.0 37,000 RL-3 10 17,000 5.0 cead 5.1 2.0 3.3 2.0 320 2.0 5.2 2.0 22 2.0 11 2.0 11 RL-3 4.0 4.2 2.0 Magnesium 4,800 10 4,800 10 5,100 10 5,200 10 7,400 10 11,000 10 9,300 RL-3 20 5,600 10 Magnesium 4,800 1.0 190 1.0 300 1.0 380 1.0 660 1.0 870 1.0 950 RL-3 2.0 2,30 1.0 Mercury 0.020 U 0.020 1.4 0.020 0.020 0.046 0.020 0.044 0.020 0.044 0.020 0.044 0.020 0.044 0.020 <td< td=""><td>Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium</td><td>250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.88 130 0.50 0.50</td><td>RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual</td><td>250 250 250 250 250 250 250 250 250 10 10 10 10 0.50 0.50</td><td>ug/kg 50 50 50 50 50 50 50 50 60 60 60 66 66 60 50 0.50 3,300</td><td>U U U U U U U U U U U U U U U U U U U</td><td>50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50</td><td>ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50 2,22</td><td>RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U</td><td>250 250 250 250 250 250 250 250 250 20 20 20 20 20 20 20 20 20 20 20 20 20</td><td>ug/kg 50 50 50 50 50 50 60 60 10/4/00 Result mg/kg 16,000 10 3.6 120 0.50 3.300</td><td>UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU</td><td>50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50</td><td>ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50 1.1</td><td>RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual</td><td>130 130 130 130 130 130 130 130 10 10 10 2.0 1.0 0.50 0.50</td><td>ug/kg 50 50 50 50 50 50 50 60 10/4/00 Result mg/kg 20,000 14 550 0.63</td><td>U U U U U U Qual</td><td>50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50</td><td>ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60</td><td>U U U U U U U U U U U U U U U U U U U</td><td>50 50 50 50 50 50 50 50 8DL 20 4.0 2.0 1.0</td><td>ug/kg 50 50 50 50 50 50 50 50 60 60 60 10/4/00 Result mg/kg 11,000 10 3.33 92 0.50 0.50 4,100</td><td>U U U U U U U U U U U U U U U U U U U</td><td>50 50 50 50 50 50 RDL 10 10 2.0 1.0 0.50 0.50 15</td></td<>	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.88 130 0.50 0.50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 10 10 10 10 0.50 0.50	ug/kg 50 50 50 50 50 50 50 50 60 60 60 66 66 60 50 0.50 3,300	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50 2,22	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 20 20 20 20 20 20 20 20 20 20 20 20 20	ug/kg 50 50 50 50 50 50 60 60 10/4/00 Result mg/kg 16,000 10 3.6 120 0.50 3.300	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50 1.1	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 10 10 2.0 1.0 0.50 0.50	ug/kg 50 50 50 50 50 50 50 60 10/4/00 Result mg/kg 20,000 14 550 0.63	U U U U U U Qual	50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 8DL 20 4.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 60 60 60 10/4/00 Result mg/kg 11,000 10 3.33 92 0.50 0.50 4,100	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 RDL 10 10 2.0 1.0 0.50 0.50 15
cead 5.1 2.0 3.3 2.0 320 2.0 5.2 2.0 22 2.0 11 2.0 11 RL-3 4.0 4.2 2.0 Magnesium 4,800 10 4,800 10 5,100 10 5,200 10 7,400 10 11,000 10 9,300 RL-3 20 5,600 10 Manganese 480 1.0 190 1.0 300 1.0 380 1.0 660 1.0 870 1.0 950 RL-3 2.0 230 1.0 Mercury 0.020 U 0.020 1.4 0.020 0.020 0.046 0.020 0.044 0.020 0.020 Melcel 18 1.0 11 1.0 61 1.0 18 1.0 24 1.0 30 1.0 31 RL-3 2.0 14 1.0 Sickel 18 1.0 1 2.0 2.0	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.88 130 0.50 0.50 0.50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 10 10 10 2.0 1.50 0.50 1.5	ug/kg 50 50 50 50 50 50 50 60 60 10/4/00 Result mg/kg 8,000 10 6.66 96 0.50 0.50 3,300	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 500 100 1	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50 2,2 24,000 67	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 200 0.50 0.50 0.50 1.0	ug/kg 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 10 3.66 120 0.50 0.50 3,300	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	S0 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50 1.1 10,000	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 10 10 2.0 0.50 0.50 1.5	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 10 44 550 0.63 0.50 32,000	U U U U U U Qual	50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 4.0 2.0 1.0 30 2.0	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 10 3.3 92 0.50 0.50 4,100	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 15
Adagnessum 4,800 10 4,800 10 5,100 10 5,200 10 7,400 10 11,000 10 9,300 RL-3 20 5,600 10 Manganese 480 1.0 190 1.0 300 1.0 380 1.0 660 1.0 870 1.0 950 RL-3 2.0 230 1.0 Mercury 0.020 U 0.020 0.045 0.020 1.4 0.020 0.020 0.046 0.020 0.040 0.020 0.044 0.020 0.035 0.020 vickel 18 1.0 11 1.0 61 1.0 18 1.0 24 1.0 30 1.0 31 RL-3 2.0 14 1.0 sickel 18 1.0 11 1.0 61 1.0 18 1.0 24 1.0 30 1.0 31 RL-3 2.0 14 1.0 sickel	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Cadmium Calcium Chromium Chromium Cobalt	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.8 130 0.50 0.50 0.50 22	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 10 10 10 2.0 1.0 0.50 0.50 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 8,000 10 6.6 96 0.50 0.50 3,300 13	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 8RDL 100 1.00 0.500 0.500 1.500 1.000 1.	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50 2,2 24,000 67	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	RDL 10 2.00 10 10 2.00 10 10 10 10 10 10 10 10 10 10 10 10 1	ug/kg 50 50 50 50 50 50 50 10/4/00 Result ing/kg 16,000 10 3.6 120 0.50 0.50 3,300 24 7.6	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.5	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50 1.1 10,000 27	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 10 2.0 1.0 0.50 0.50 15 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 14 550 0.63 0.50 32,000	U U U U U U Qual	50 50 50 50 50 50 50 50 70 8 RDL 10 10 0.50 0.50 0.50 1.50	ug/kg 50 50 50 50 50 50 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 39	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 50 4.0 20 4.0 1.0 30 2.0 2.0	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 10 3.3 92 0.50 0.50 4,100 7.1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 0.50 0.50 15 1.0
Manganese 480 1.0 190 1.0 300 1.0 380 1.0 660 1.0 870 1.0 950 RL-3 2.0 230 1.0 Mercury 0.020 U 0.020 0.045 0.020 1.4 0.020 0.020 0.046 0.020 0.040 0.020 0.044 0.020 0.035 0.020 Nickel 18 1.0 11 1.0 61 1.0 18 1.0 24 1.0 30 1.0 31 RL-3 2.0 14 1.0 Selcinium 2.0 U 2.0	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.8 130 0.50 0.50 3500 22 11	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 8,000 6,6 96 0,50 0,50 3,300 13 6,6 14,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 70 10 10 10 0.50 0.50 1.50 1.00 1.00 1.00	ug/kg 250 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 0.50 2.2 24,000 67 5.0 18,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	RDL 10 2.00 2.00 2.00 2.00 2.00 2.00 2.00	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 0.50 0.50 0.50 0.50 0.50 0.50 0.24 7.6 20,000	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 70 10 10 2.0 0.50 0.50 1.5 1.0	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50 1.1 10,000 27	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 10 10 2.0 0.50 0.50 1.5 1.0	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U Qual	50 50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.1 1.0 1.0 0.50	ug/kg 50 50 50 50 50 50 50 60 50 10/5/00 Result mg/kg 20 5.8 200 1.0 3.990 39 16	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 RDL 20 4.0 2.0 1.0 30 2.0 2.0	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 0.50 0.50 4,100 20 7.1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 0.50 0.50 15 1.0 5.0
Mcrury 0.020 U 0.020 0.045 0.020 1.4 0.020 0.020 0.046 0.020 0.046 0.020 0.040 0.020 0.044 0.020 0.035 0.020 Rickel 18 1.0 11 1.0 61 1.0 18 1.0 24 1.0 30 1.0 31 RL-3 2.0 14 1.0 Selenium 2.0 U 2.0 U 2.0 U 2.0 2.0 U 2.0 U 2.0 2.0 U 2.0	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 2.8 130 0.50 0.50 0.50 3500 22 11 19,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 10 10 10 0.50 0.50 1.0 1.0 2.0	ug/kg 50 50 50 50 50 50 50 60 50 10/4/00 Result mg/kg 8,000 10 6.6 96 0.50 0.50 3.300 13 6.6 14,000 3.3	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 700 100 100 100 0.500 0.500 150 1.00 1.00	ug/kg 250 250 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	RDL 10 2.0 2.0 10 2.0 2.0 10 10 10 10 10 10 10 10 10 10 10 10 10	ug/kg 50 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 0.50 0.50 3,300 24 7.6 20,000 5.2	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 70 8D1 10 10 2.0 1.0 0.50 0.50 1.5 1.0	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 7.1 190 0.50 1.1 10,000 27 18 22,000	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 10 10 10 2.0 0.50 0.50 1.0 1.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U Qual	50 50 50 50 50 50 50 50 50 70 10 10 0.50 0.50 1.5 1.5 1.0 1.0 0.50 0.5	ug/kg 50 50 50 50 50 50 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 70 8DL 20 4.0 1.0 1.0 30 2.0 1.0 4.0	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 3.3 92 0.50 0.50 4.100 20 7.1 17,000 4.2	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 10 10 2.0 1.0 0.50 1.5 1.0 1.0 2.0
Scientism 18 1.0 11 1.0 61 1.0 18 1.0 24 1.0 30 1.0 31 RL-3 2.0 14 1.0 Selenium 2.0 U 2	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 2.8 130 0.50 0.50 3500 22 11 19,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 10 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 RDL 100 1.00 0.500 0.500 1.00 1.00 0.500 1.00 1.	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12.000 18 2.800 0.50 2.2 24,000 67 5.00 18,000 320 5,100	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	RDL 10 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50	ug/kg 50 50 50 50 50 50 50 50 50 50 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 10 2.0 1.0 0.50 1.5 1.0 1.0 1.0 1.0	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 7.1 190 0.50 1.1 10,000 27 18 22,000 22 7,400	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 10 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0	ug/kg 50 50 50 50 50 50 50 60 50 10/4/00 Result mg/kg 20,000 14 550 0.63 0.50 32,000 31 14 25,000 11 11,000	U U U U U U Qual	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 50 50 50 50 50 50 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 39 16 37,000 11	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 20 4.0 1.0 30 2.0 2.0 2.0 10 4.0 2.0	ug/kg 50 50 50 50 50 50 50 50 60 60 10/4/00 Result mg/kg 11,000 3.3 92 0.50 0.50 4,100 20 7.11 17,000 4.2 5,600	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 15 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
Selenium 2.0 U 2.0 U 2.0 2.0 U 2.0 2.0 U 2.0	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 2.8 130 0.50 0.50 3500 22 11 19,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 100 1.00 0.500 1.00 1.	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12.000 18 2.800 0.50 2.2 24,000 67 5.00 18,000 320 5,100	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	RDL 10 2.0 0.50 0.50 0.50 0.50 0.50 0.50 0.50	ug/kg 50 50 50 50 50 50 50 50 50 50 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 10 2.0 1.0 0.50 1.5 1.0 1.0 1.0 1.0	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 7.1 190 0.50 1.1 10,000 27 18 22,000 22 7,400	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 10 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0	ug/kg 50 50 50 50 50 50 50 60 50 10/4/00 Result mg/kg 20,000 14 550 0.63 0.50 32,000 31 14 25,000 11 11,000	U U U U U U Qual	500 500 500 500 500 500 500 500 100 0.500 0.500 1.00 1.	ug/kg 50 50 50 50 50 50 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 39 16 37,000 11	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 20 4.0 1.0 30 2.0 2.0 2.0 10 4.0 2.0	ug/kg 50 50 50 50 50 50 50 50 60 60 10/4/00 Result mg/kg 11,000 3.3 92 0.50 0.50 4,100 20 7.11 17,000 4.2 5,600	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0
Sodium 460 10 220 10 270 10 200 10 430 10 1,700 10 910 RL-3 20 520 10 Challium 10 U 10<	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.8 130 0.50 0.50 3500 22 11 19,000 5.1 4,800 480	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 8,000 10 6.6 96 0.50 3,300 13 6.6 14,000 3.3 4,800 190 0.045	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 100 0.500 1.00 5.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1	ug/kg 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50 2,2 24,000 67 5,00 18,000 320 5,100 300	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 10 3.6 120 0.50 3.300 24 7.6 20,000 5.2 5,200 380 0.020	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50 1.1 10,000 27 18 22,000 660 0.046	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U Qual	130 130 130 130 130 130 130 130 10 2.0 1.0 0.50 0.50 15 1.0 1.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 14 550 0.63 0.50 32,000 31 14 25,000 870 0.040	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 50 50 50 50 50 50 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 39 16 37,000 37,000 950 0.044	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 20 4.0 2.0 1.0 30 2.0 2.0 4.0 2.0 2.0 2.0 2.0	ug/kg 50 50 50 50 50 50 50 50 60 50 10/4/00 Result mg/kg 11,000 3.3 92 0.50 4,100 20 7.1 17,000 4,2 5,600 230	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 0.50 0.50 1.0 1.0 5.0 1.0 1.0 0.0 1.0 1.0 1.0 1.0 1
Thallium 10 U 10	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.8 130 0.50 0.50 3500 22 11 19,000 480 0.020	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual U	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 60 60 60 60 66 96 0.50 0.50 3,300 13 6.6 14,000 3.3 4,800 190 0.045	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 250 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50 2,2 24,000 67 5,0 18,000 320 5,100 300 1.4	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 10 3.6 120 0.50 3.300 24 7.6 20,000 5.2 5,200 380 0.020	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 199 0.50 1.1 10,000 27 18 22,000 22 7,400 660 0.046	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U U U	130 130 130 130 130 130 130 130 130 10 10 10 0.50 0.50 1.0 1.0 1.0 0.020 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 14 550 0.63 0.50 32,000 31 14 25,000 870 0.040	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 10 0.50 0.50 1.0 5.0 1.0 1.0 0.20 1.0	ug/kg 50 50 50 50 50 50 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 39 16 37,000 37,000 950 0.044	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 20 4.0 1.0 1.0 30 2.0 4.0 2.0 2.0 0.020 2.0	ug/kg 50 50 50 50 50 50 50 50 60 50 10/4/00 Result mg/kg 11,000 3.3 92 0.50 4,100 20 7.1 17,000 4,2 5,600 230	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 8DL 10 10 2.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.
Thallium 10 U 10 10 U 10 10 U 10 10 U 10 U 10 U	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.8 130 0.50 0.50 3500 22 11 19,000 480 0.020	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual U	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 8,000 10 6.6 96 0.50 0.50 13 6.6 14,000 3.33 4,800 190 0.045 11	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 250 250 250 250 250 250 250 250 250 10/4/00 Result mg/kg 12,000 18 2,800 0,50 2,2 24,000 67 5,0 18,000 320 5,100 300 1.4	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 10 3.6 120 0.50 3.300 24 7.6 20,000 5.2 5,200 380 0.020	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 1.0 5.0 1.0 1.0 0.0 1.0 0.0 1.0	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 199 0.50 1.1 10,000 27 18 22,000 22 7,400 660 0.046	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U U U	130 130 130 130 130 130 130 130 130 10 10 10 0.50 0.50 1.0 1.0 1.0 0.020 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 10 14 550 0.63 0.50 32,000 11 11,000 870 0.040	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 10 0.50 0.50 1.0 5.0 1.0 1.0 0.20 1.0	ug/kg 50 50 50 50 50 50 50 60 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 37,000 11 9,300 950 0.044 31	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 20 4.0 1.0 1.0 30 2.0 4.0 2.0 2.0 0.020 2.0	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 10 3.3,3 92 0.50 0.50 4,100 20 7.11 17,000 4.22 5,600 230 0.035	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 8DL 10 10 2.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.
/anadium 43 1.0 31 1.0 37 1.0 47 1.0 40 1.0 57 1.0 82 RL-3 2.0 38 1.0	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 10 2.88 130 0.50 0.50 3500 22 11 19,000 5.11 4,800 480 0.020	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual U	250 250 250 250 250 250 250 250 250 250	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 8,000 10 6.6 96 0.50 0.50 13 6.6 14,000 3.33 4,800 190 0.045 11	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 250 250 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	RDL 10 2.00 2.00 2.00 2.00 2.00 2.00 2.00	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result ing/kg 16,000 0.50 0.50 0.50 0.50 0.50 5.2 5,200 0.020 18 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0 0.50 0.50 1.0 5.0 1.0 1.0 0.20 1.0 0.20 2.0	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 10 7.1 190 0.50 1.1 10,000 27 18 22,000 22 7,400 660 0.046 24 2.0	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U U U	130 130 130 130 130 130 130 130 10 10 10 10 0.50 0.50 1.0 1.0 1.0 0.020 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 10 14 550 0.63 0.50 32,000 11 11,000 870 0.040 30	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 10 20 0.50 1.0 5.0 1.0 1.0 2.0 2.0	ug/kg 50 50 50 50 50 50 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 20 20 4.0 1.0 30 2.0 1.0 4.0 2.0 10 4.0 2.0 4.0 2.0 4.0 2.0 4.0 4.0 2.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 10 3.3 92 0.50 0.50 4,100 20 7.11 17,000 4,2 5,600 230 0.035 14 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1
	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 2.8 130 0.50 0.50 3500 22 11 19,000 5.1 4,800 480 0.020 0.020	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	250 250 250 250 250 250 250 250 250 10 10 0.50 0.50 1.0 1.0 0.020 1.0 0.020	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 8,000 10 6.6 96 0.50 0.50 3,300 13 6.6 14,000 3.3 4,800 190 0.045 11 2.0	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 1.00 0.500 1.00 1.	ug/kg 250 250 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	RDL 10 2.0 2.0 0.50 0.50 0.50 0.50 0.50 0.50	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 16,000 20,000 5.2 5,200 380 0.020 18 2.0 200 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 10 10 2.0 0.50 1.0 1.0 1.0 0.0 2.0 10 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 7.1 190 0.50 1.1 10,000 27 18 22,000 22 7,400 660 0.046 24 2.0	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U U U	130 130 130 130 130 130 130 130 10 10 2.0 0.50 0.50 1.0 1.0 2.0 1.0 0.020 1.0 0.020 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 10 14 550 0.63 0.50 32,000 11 11,000 870 0.040 30 2.0	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 0.500 1.00 1.	ug/kg 50 50 50 50 50 50 50 60 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 39 16 37,000 11 9,300 950 0.044 31 4.0 910	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 20 20 4.0 1.0 30 2.0 1.0 4.0 2.0 10 4.0 2.0 4.0 2.0 4.0 2.0 4.0 4.0 2.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4	ug/kg 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 0.50 0.50 0.50 17,1 17,000 4.2 5,600 0.035 14 2.0 520	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 60 70 10 10 2.0 1.0 0.50 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1
	Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Cadmium Calcium Chromium Chromium Choalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium	250 250 250 250 250 250 250 10/4/00 Result mg/kg 14,000 2.8 130 0.50 0.50 3500 22 11 19,000 480 0.020 18 2.0 460	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	250 250 250 250 250 250 250 250 250 10 10 0.50 0.50 1.0 1.0 0.020 1.0 0.020 1.0	ug/kg 50 50 50 50 50 50 50 60 50 10/4/00 Result mg/kg 8,000 10 6.6 96 0.50 0.50 3,300 13 6.6 14,000 3,3 4,800 190 0.045 11 2,0 220	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 1.00 0.500 1.00 1.	ug/kg 250 250 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	RDL 100 2.00 2.00 1.00 1.00 0.020 1.00 1.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 10 10 2.0 0.50 1.0 1.0 1.0 0.20 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	ug/kg 130 130 130 130 130 130 130 130 10/4/00 Result mg/kg 13,000 7.1 190 0.50 1.1 10,000 27 18 22,000 22 7,400 660 0.046 24 2.0 430	RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U RL-1,U U U	130 130 130 130 130 130 130 130 10 10 2.0 0.50 0.50 1.0 5.0 2.0 1.0 0.020 1.0 0.020 1.0	ug/kg 50 50 50 50 50 50 50 10/4/00 Result mg/kg 20,000 10 14 550 0.63 0.50 32,000 11 11,000 870 0.040 0.040 10 1700 10 1700 10 1700	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 0.500 1.00 1.	ug/kg 50 50 50 50 50 50 50 60 50 10/5/00 Result mg/kg 33,000 1.0 1.0 3,900 39 16 37,000 11 9,300 950 0.044 31 4.0 910	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 50 50 50 20 20 4.0 1.0 30 2.0 2.0 10 4.0 20 2.0 4.0 20 2.0 4.0 20 2.0 4.0 20 20 20 20 20 20 20 20 20 20 20 20 20	ug/kg 50 50 50 50 50 50 50 50 50 10/4/00 Result mg/kg 11,000 0.50 4.100 20 7.11 17,000 4.2 5,600 230 0.035 14 2.0 520	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 0.50 1.0 1.0 5.0 2.0 1.0 1.0 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.

Notes: A-01 = Sample used for MS/MSD was subcontracted to Del Mar Analytical, Colton Laboratory. Therefore MS/MSD results were not reported.

B1 = Sodium was detected in the Method Blank of batch 10/10539. Sodium concentration in the samples are greater than 10X the concentration found in the method blank.

C1 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131

C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 51

M-HA = Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS)

RL-1 = Reporting limit raised due to sample matrix interference.

RL-3 = Reporting limit raised due to high concentrations of non-target analytes.

U = Constituent not detected above laboratory's reporting limits.

Polychlorinated Biphenyls, Pesticides, and Metals Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

Sample Location																											
	Parcel 32			Parcel 32			Parcel 28	Т	_	Parcel 28	Г	Γ.	Parcel 28			Parcel 28	, ,		Parcel 28			Parcel 12	T	Т	Parcel 12	Page	e 2 of 4
Sample Number	WDI-SB-D	P-9-7	<u> </u>	WDI-SB-D	P-9-20	†	WDJ-SB-E	P-13-8	_	WDI-SB-D	PFD-13-	8	WDI-SB-D	P-13-20		WDI-SB-D	P-16-6		WDI-SB-D	P-16-16	 	WDI-SB-D	P-20-10	 		PFD-20-10	
Sample Type	Waste		ļ	Native	1	 	Native		 	Native		Ť	Native			Fill	1	<u> </u>	Native			Waste	T	+	Waste	1	†
Sample Depth	7		 	20	<u> </u>	1	8	1		8	1	† -	20			6			16		<u> </u>	10		1	10	 	1-
Sample Date	10/4/00	<u> </u>		10/4/00	 	1	10/5/00	 -	_	10/5/00		 	10/5/00			10/5/00			10/5/00			10/10/00		 	10/10/00		\dagger
Laboratory	Del Mar An	alytical	<u>├</u>	Del Mar An	nalytical	 -	Del Mar A	nalytical	1	Del Mar Ar	nalytical		Dei Mar Ar	alvtical		Del Mar Ai	alvtical		Del Mar An	alytical		Del Mar Ar	nalytical	1	Del Mar Ai	nalytical	+
Lab Sample ID	1JJ0127-01	<u>,</u>	├	JJJ0127-02	·	†	1330197-01		1	1JJ0197-02	1	 	JJ0197-03	1	-	1JJ0197-04			IJJ0197-05	,,,,,,,		1,1,0315-03	1		IJJ0315-04	1	+
Analysis Date	10/11/00		 	10/11/00	_	+	10/12/00			10/12/00		 	10/17/00			10/12/00	-	_	10/12/00			10/15/00		+	10/15/00		+
Allalysis Date	Result	Qual	RDL	Result	Qual	PDI	Result		RDL	Result	Qual	PDI	Result	_	PDI	Result	Qual	PIN	Result	Qual	RDL	Result	Qual	RDL		Qual	RDL
	ug/kg	Quai	KDL	ug/kg	Quai	KDL	ug/kg	Quai	KDL	ug/kg	Quai	KDL	ug/kg	Quai	KDI.	ug/kg	Quai	KDL	ug/kg	Quai	NDC	ug/kg	Quai	KDC	ug/kg	Quai	KDE
4,4'-DDD	50	RL-1,U	50		υ	5.0		υ	5.0		υ	5.0	5.0	U	5.0	5.0	Ü	5.0	25	RL-1,U	25	50	RL-1,U	50		RL-1,U	50
4,4'-DDE	50		50			5.0		-	5.0	← — —		5.0	5.0		5.0	5.0		5.0	25	RL-1,U	25		RL-1,C2,U	50		RL-1,C2,U	+
4,4'-DDT	+	RL-1,C2,U	50			5.0			5.0			5.0	5.0		5.0	5.0				RL-1,C1,C2,U	25			50		RL-1,C2,U	
Aldrin	50		50			5.0		+	5.0			5.0	5.0		5.0	5.0		5.0	25		25			50	+		50
alpha-BHC	50		50			5.0			5.0			5.0	5.0		5.0	5.0		5.0	25		25			50			50
beta-BHC	+		50			5.0			5.0			5.0		U	5.0	5.0		5.0	_		25			50			50
	50					50		+	50			50	50		50	50			25	RL-1,U		500		_			
Chlordane	500		500					+		10		10			10			50		RL-1,U	250		+	500			100
delta-BHC	100		100			10			10			+ · · ·	10 5.0		5.0	10		10 5.0	50	RL-1,U	50		 	. 100			
Dieldrin	50		50			5.0		+	5.0			5.0		_		5.0				RL-I,U	25			50			50
Endosulfan I	50	RL-1,U	50			5.0		+	5.0			5.0	5.0		5.0	5.0		5.0	25		25			50			50
Endosulfan II	50		50	_	+	5.0			5.0			5.0	5.0		5.0	5.0		5.0	25		25		+	50			50
Endosulfan sulfate	100		100			10	10		10			10	10		10	10		10	50	RL-1,U	50					RL-1,C2,U	100
Endrin	50		50			5.0		-	5.0			5.0	5.0		5.0	5.0		5.0	25		25			50			50
Endrin aldehyde	50		50		+	5.0	5.0		5.0			5.0	5.0		5.0	5.0		5.0	25	RL-1,C2,U	25		RL-1,C2,U	50		RL-1,C2,U	50
Endrin ketone	50		50		+	5.0	5.0	+	5.0			5.0	5.0		5.0	5.0		5.0	25	RL-1,U	25		RL-1,C2,U	50			50
gamma-BHC (Lindane)	50		50		+	5.0		+	5.0			5.0	5.0		5.0	5.0		5.0	25		25	50		50		RL-1,U	50
Heptachlor	50		50			5.0		+	5.0			5.0	5.0		5.0	5.0		5.0	25	RL-1,U	25	50		50	+		50
Heptachlor epoxide	50		50			5.0	5.0	+	5.0			5.0	5.0		5.0	5.0		5.0	25	RL-1.U	25	50		50			50
Methoxychlor		RL-1,C2,U	50			5.0		CI,U	5.0			5.0	5.0		5.0		CI,U	5.0		RL-1,C1,C2,U	25		RL-1.C2.U	50	+		50
Toxaphene	2,000	RL-1.U	2,000		U	200	200		200		-	200	200	U	200	200		200		RL-1,U	1,000	2,000		2,000	+	RL-1,U	2,000
Analysis Date	10/5/00	, _	-	10/5/00	<u> </u>		10/10/00	-	-	10/10/00			10/12/00			10/10/00	 +		10/11/00			10/12/00	+- -	<u> </u>	10/12/00		ļ
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL.	Result	Qual	RDL	Result	Qual	RDL
	ug/kg			ug/kg		L	ug/kg	ļ	ļ	ug/kg		L.	ug/kg			ug/kg			ug/kg			ug/kg		ļ	ug/kg		<u> </u>
Aroclor 1016	50	U	50	50	-	50	50		50			50	50		50	50		50	50	U	50	50		50		υ	50
Aroclor 1221	50	U	50	50	U	50	50		50			50	50	U	50	50		50	50	U	50	50	Ū	50		U	50
Aroclor 1232	50		50			50		+	50			50	50		50	50		50	50	υ	50	50	U	50		U	50
Aroclor 1242	50	U	50			50	50	U	50		U	l 50									50	50		1 60	50	U	50
Aroclor 1248	50	U	50	50	1					50			50		50	50		50	50	U			U	50		U	50
Aroclor 1254	50				+	50	50		50	50	U	50	50	U	50	50	U	50 50	50	U	50	50	υ	50			
Aroclor 1260		U	50	50	U	50	50	U	50 50	50 50	U	50 50	50 50	U U	50 50	50 50	U		50 50	U U	50 50	50 50	U	50 50	50	Ų	50
	50	บ บ	50 50		U		50	U	50	50 50	U	50	50	U U	50	50 50 50	υ υ υ		50	U U	50	50	U	50	50	U	50
Analysis Date				50	U	50	50	U	50 50	50 50	U	50 50	50 50	U U	50 50	50 50	υ υ υ		50 50	U U	50 50	50 50	U	50 50	50		
	50			50 50	U	50	50 50	U	50 50 50	50 50 50 10/16/00	υ υ υ	50 50 50	50 50 50	U U	50 50 50	50 50 50 10/15/00	υ υ υ	50 50 50	50 50 50 10/15/00	บ บ บ	50 50	50 50 50 10/18/00	U	50 50 50	50		
	50 10/9/00	U	50	50 50 10/11/00	U	50	50 50 10/13/00	U	50 50 50	50 50 50 10/16/00	υ υ υ	50 50 50	50 50 50 10/15/00	U U U	50 50 50	50 50 50 10/15/00	บ บ บ	50 50 50	50 50 50 10/15/00	บ บ บ	50 50 50	50 50 50 10/18/00	U U U	50 50 50	50 50 10/18/00	U	50
	50 10/9/00 Result	U	50	50 50 10/11/00 Result	U U Qual	50	50 50 10/13/00 Result	U U Qual	50 50 50	50 50 50 10/16/00 Result mg/kg	U U U Qual	50 50 50	50 50 50 10/15/00 Result	U U U	50 50 50	50 50 50 10/15/00 Result	บ บ บ	50 50 50	50 50 50 10/15/00 Result	บ บ บ	50 50 50	50 50 50 10/18/00 Result	U U U	50 50 50	50 50 10/18/00 Result	U	50
Analysis Date	50 10/9/00 Result mg/kg	U	50	50 50 10/11/00 Result mg/kg	U U Qual	50 50 RDL	50 50 10/13/00 Result mg/kg	U U Qual	50 50 50 RDL	50 50 50 10/16/00 Result mg/kg 21,000	U U U Qual	50 50 50 RDL	50 50 50 10/15/00 Result mg/kg	U U U	50 50 50	50 50 50 10/15/00 Result mg/kg	U U U Quał	50 50 50	50 50 50 10/15/00 Result mg/kg	บ บ บ	50 50 50 RDL	50 50 50 10/18/00 Result mg/kg	U U U	50 50 50	50 50 10/18/00 Result mg/kg 11.000	U	S0 RDL
Analysis Date Aluminum	50 10/9/00 Result mg/kg 16,000	U Qual	50 RDL 10	50 50 10/11/00 Result mg/kg	U U Qual RL-3 RL-3,U	50 50 RDL	50 50 10/13/00 Result mg/kg 14,000	U U Qual M-HA U	50 50 50 RDL	50 50 50 10/16/00 Result mg/kg 21,000	U U U Qual	50 50 50 RDL	50 50 50 10/15/00 Result mg/kg 20,000	U U U Qual	50 50 50 RDL	50 50 50 10/15/00 Result mg/kg 19,000	U U U Qual	50 50 50	50 50 50 10/15/00 Result mg/kg 22,000	U U U Qual	50 50 50 RDL	50 50 50 10/18/00 Result mg/kg 9,500	U U U Qual	50 50 50 RDL	50 50 10/18/00 Result mg/kg 11.000	U Qual	S0 RDL
Analysis Date Aluminum Antimony	50 10/9/00 Result mg/kg 16,000	U Qual	50 RDL 10	50 50 10/11/00 Result ing/kg 23,000 20	U U Qual RL-3 RL-3,U RL-3	50 50 RDL 20 20	50 50 10/13/00 Result mg/kg 14,000	U U Qual M-HA U	50 50 50 RDL	50 50 50 10/16/00 Result mg/kg 21,000 20 4.0	U U U Qual RL-1 RL-3,U RL-3,U	50 50 50 RDL 20	50 50 50 10/15/00 Result mg/kg 20,000	U U U Qual	50 50 50 RDL 10	50 50 50 10/15/00 Result mg/kg 19,000	U U U Qual	50 50 50 8DL 10	50 50 50 10/15/00 Result mg/kg 22,000	U U U Qual	50 50 50 RDL 10	50 50 10/18/00 Result mg/kg 9,500	U U U Qual	50 50 50 RDL 10	50 50 10/18/00 Result mg/kg 11.000 10	U Qual	50 RDL 10
Analysis Date Aluminum Antimony Arsenic	50 10/9/00 Result mg/kg 16,000 10 7.0	U Qual	50 RDL 10 10 2.0	50 50 10/11/00 Result ing/kg 23,000 20 7.1	U U Qual RL-3 RL-3,U RL-3 RL-3	50 50 RDL 20 20 4.0	50 50 10/13/00 Result mg/kg 14,000 10	U U Qual M-HA U	50 50 50 RDL 10 10	50 50 50 10/16/00 Result mg/kg 21,000 20 4.0	U U U Qual RL-1 RL-3,U RL-3,U	50 50 50 RDL 20 20 4.0 2.0	50 50 10/15/00 Result mg/kg 20,000 10	U U Qual	50 50 50 RDL 10 10	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3	U U U Qual	50 50 50 50 RDL 10 10	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1	U U U Qual	50 50 50 RDL 10 10	50 50 10/18/00 Result mg/kg 9,500 10	U U U Qual	50 50 50 RDL 10 10 2.0	50 50 10/18/00 Result mg/kg 11.000 10	U Qual	10 10 2.0
Aluminum Antimony Arsenic Barium	50 10/9/00 Result mg/kg 16,000 10 7.0 650	U Qual	50 RDL 10 10 2.0 1.0	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220	Qual RL-3 RL-3,U RL-3 RL-3,U RL-3 RL-3,U	50 50 8DL 20 20 4.0 2.0	50 50 10/13/00 Result mg/kg 14,000 10 2.2	U U Qual M-HA U M	50 50 50 RDL 10 10 10	50 50 50 10/16/00 Result mg/kg 21,000 20 4.0 190	U U U Qual RL-1 RL-3,U RL-3,U	50 50 50 RDL 20 20 4.0 2.0	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130	U U Qual U	50 50 50 RDL 10 10 2.0	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3	U U Qual	50 50 50 50 RDL 10 10 2.0	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1	U U U Qual	50 50 50 RDL 10 10 2.0	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2	U U U Qual	50 50 50 RDL 10 10 2.0	50 50 10/18/00 Result mg/kg 11.000 10 4.7 79	U Quat U	10 10 2.0
Analysis Date Aluminum Antimony Arsenic Barium Beryllium	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50	U Qual	50 RDL 10 10 2.0 1.0 0.50	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220	Qual RL-3 RL-3,U RL-3 RL-3,U RL-3,U RL-3,U RL-3,U	50 50 RDL 20 20 4.0 2.0	50 50 10/13/00 Result mg/kg 14,000 10 2.2 150 0.50	U U Qual M-HA U M	50 50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 50 10/16/00 Result mg/kg 21,000 20 4.0 190 1.0	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U	50 50 50 8DL 20 20 4.0 2.0	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130	U U Qual U	50 50 50 8DL 10 10 2.0 1.0	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140	U U Qual	50 50 50 50 8DL 10 10 2.0 1.0	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52	U U Qual	50 50 50 RDL 10 10 2.0 1.0	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50	U U U Qual	50 50 50 RDL 10 10 2.0 1.0	50 50 10/18/00 Result mg/kg 11.000 10 4.7 79 0.50	U Qual U	RDL 10 10 2.0 1.0
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50	U Qual	50 RDL 10 10 2.0 1.0 0.50	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0	U U Qual RL-3 RL-3,U RL-3 RL-3,U RL-3,U RL-3,U	50 50 RDL 20 20 4.0 2.0 1.0	50 50 10/13/00 Result mg/kg 14,000 10 2.2 150 0.50	U U U U U U U U U U U U U U U U U U U	50 50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 50 10/16/00 Result mg/kg 21,000 20 4.0 190 1.0 3.600	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U	50 50 50 RDL 20 20 4.0 2.0 1.0	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50	U U U U U	50 50 50 RDL 10 10 2.0 1.0 0.50	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50	U U Qual	50 50 50 50 RDL 10 10 1.0 0.50 0.50	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52	U U Qual	50 50 50 RDL 10 10 2.0 0.50 0.50	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50	U U U Qual	50 50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 10/18/00 Result mg/kg 11.000 4.7 79 0.50 0.50	U Qual U	10 10 2.0 1.0 0.50 0.50
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96	U Qual	50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 1.0	U U U U U U U U U U U U U U U U U U U	50 50 RDL 20 20 4.0 2.0 1.0	50 50 10/13/00 Result mg/kg 14,000 10 2.2 150 0.50 2,200	U U U U M-HA U U M-HA	50 50 50 RDL 10 10 2.0 0.50 0.50	50 50 50 10/16/00 Result mg/kg 21,000 20 4.0 190 1.0 3.600	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	50 50 50 RDL 20 20 4.0 2.0 1.0	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50	U U Qual U U U	50 50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 4,600	U U Quah	50 50 50 50 RDL 10 10 2.0 1.0 0.50 0.50 15	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200	U U Qual	50 50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 50 10/18/00 Result mg/kg 9,500 10 3.2 72 0.50 0.50 3,900	U U U Qual	50 50 50 RDL 10 2.0 1.0 0.50 0.50	50 50 10/18/00 Result mg/kg 11.000 10 4.7 79 0.50 0.50 5,100	U Qual U	10 10 2.0 1.0 0.50 0.50 15
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000	U Qual	50 RDL 10 10 2.0 1.0 0.50 0.50 15 1.0	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 1.0 17,000	Qual RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	50 50 8DL 20 20 4.0 2.0 1.0 30 2.0	50 50 10/13/00 Result mg/kg 14,000 10 2.22 150 0.50 0.50 2,200 25 9,4	U U U U U U U U U U U U U U U U U M-HA	50 50 50 8DL 10 2.0 1.0 0.50 0.50 1.0	50 50 50 10/16/00 Result mg/kg 21,000 20 4,0 190 1,0 1,0 3,600 30	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,RL-3,U RL-3	50 50 50 RDL 20 4.0 2.0 1.0 30 2.0	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000	U U Qual U U U	50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 15	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28	U U Quah	50 50 50 50 RDL 10 10 2.0 1.0 0.50 0.50 15	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.52 0.50 6,200	U U Qual	50 50 50 RDL 10 2.0 1.0 0.50 0.50 15	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50 3,900	U U U Qual	50 50 50 RDL 10 2.0 1.0 0.50 0.50 1.5	50 50 10/18/00 Result mg/kg 11.000 10 4.7 79 0.50 0.50 0.50 5,100	U Qual U	10 10 2.0 1.0 0.50 0.50 1.5 1.0
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44	U Qual	50 RDL 10 10 2.0 1.0 0.50 0.50 15 1.0	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 1.0 17,000 36	Qual RL-3 RL-3,U RL-3 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	50 50 8DL 20 20 4.0 2.0 1.0 30 2.0	50 50 10/13/00 Result mg/kg 14,000 10 2.22 150 0.50 0.50 2,200 25 9,4	U U U U M-HA U U M-HA	50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 50 50 10/16/00 Result mg/kg 21,000 4.0 1.0 1.0 3.600 30 9.6	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3 RL-3 RL-3	50 50 50 8DL 20 4.0 1.0 30 2.0 2.0	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35	U U Qual U U U	50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000	U U U U U U U U U U U U U U U U U U U	50 50 50 8D1 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000	U U Qual	50 50 50 RDL 10 2.0 1.0 0.50 0.50 15 1.0	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50 3,900 16 4.9	U U U Qual	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 50 10/18/00 Result mg/kg 11.000 4.7 79 0.50 0.50 0.50 5,100 19 6.4	U Qual U	10 10 2.0 1.0 0.50 0.50 1.5 1.0
Analysis Date Aluminum Antimony Arsenic Barium Cadmium Calcium Chromium Cobalt Iron Lead	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44 16 20,000	U Qual	50 RDL 10 10 2.0 1.0 0.50 0.50 15 1.0 1.0 5.0	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 17,000 36 15 27,000	U U U U U U U U U U U U U U U U U U U	50 50 8DL 20 20 4.0 2.0 1.0 30 2.0 2.0	50 50 10/13/00 Result mg/kg 14,000 2.2 150 0.50 2.200 2.200 2.5 9.4 21,000	U U U U M-HA U U U M-HA M-HA	50 50 50 8DL 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 10/16/00 Result mg/kg 21,000 4.0 1.0 1.0 3.600 9.6 27,000 7.3	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3 RL-3 RL-3 RL-3 RL-3	500 500 500 200 4.00 1.00 2.00 2.00 100 4.00	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 10 23,000	U U Qual U U U	50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000 6.6	U U U U U U U U U U U U U U U U U U U	50 50 50 50 10 10 2.0 1.0 0.50 1.0 1.0	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2	U U Qual	50 50 50 10 10 2.0 1.0 0.50 0.50 15 1.0 5.0	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50 3,900 16 4.9 13,000 5.0	U U U Qual	50 50 50 10 10 2.0 1.0 0.50 0.50 1.5 1.0 1.0 2.0	50 50 10/18/00 Result mg/kg 11.000 10 4.7 79 0.50 0.50 5,100 6.4 15,000	U Qual U	10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44 16 20,000 110 7,300	U Qual	50 RDL 10 10 2.0 1.0 0.50 0.50 15 1.0 1.0 5.0 2.0	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 17,000 36 15 27,000 13 12,000	U U U U U U U U U U U U U U U U U U U	50 50 8DL 20 20 4.0 2.0 1.0 30 2.0 2.0 1.0 4.0 2.0 2.0 2.0 2.0 2.0	50 50 10/13/00 Result mg/kg 14,000 2,2 150 0,50 2,200 2,200 2,1,000 6,5 6,000	U U U U U U U U U U U U U U U U U M-HA	50 50 50 8DL 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 10/16/00 Result mg/kg 21,000 4.0 1.0 1.0 3.600 9.6 27,000 7.3 6,700	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3 RL-3 RL-3 RL-3 RL-3	500 500 500 200 2.00 1.00 2.00 2.00 2.00 4.00 2.00 2.00 2.00 2	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 10 23,000 7.2	U U Qual U U U	50 50 50 50 10 10 2.0 1.0 0.50 1.5 1.0 1.0 5.0 2.0	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000 6.6 6,800	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0 1.0	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2 9,800	U U Qual	50 50 50 10 10 2.0 1.0 0.50 0.50 15 1.0 1.0 2.0	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0,50 0,50 3,900 16 4,9 13,000 5,0	U U U Qual	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 1.0 2.0	50 50 10/18/00 Result mg/kg 11.000 4.7 79 0.50 0.50 5,100 19 6.4 15,000 6.3	U Qual U	10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese	50 10/9/00 Result mg/kg 16,000 7.0 650 0.50 0.96 15,000 44 16 20,000 110 7,300	U Qual	50 RDL 10 2.0 1.0 0.50 0.50 1.5 1.0 1.0 5.0 2.0 10	50 50 10/11/00 Result mg/kg 23,000 7.1 220 1.0 17,000 36 15 27,000 13 12,000 860	U U U U U U U U U U U U U U U U U U U	50 50 8DL 20 20 4.0 2.0 1.0 30 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	50 50 10/13/00 Result mg/kg 14,000 2.2 150 0.50 0.50 2,200 25 9,4 21,000 6,5 6,000	U U Qual M-HA U U U M-HA M-HA M-HA	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 10/16/00 Result mg/kg 21,000 4.0 1.0 1.0 3.600 30 9.6 27,000 7.3 6,700 500	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3 RL-3 RL-3 RL-3 RL-3	500 500 500 200 2.00 1.00 2.00 2.00 4.00 2.00 2.00 2.00 2.00 2	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 10 23,000 7.2 11,000	U U Qual U U U	50 50 50 50 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0 1.0	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000 6.6 6,800 500	U U Qual	50 50 50 50 50 10 10 2.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 1.0 1.0	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2 9,800 550	U U Qual	50 50 50 10 10 2.0 0.50 0.50 15 1.0 5.0 2.0 10	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50 3,900 16 4.9 13,000 5.0 4,300	U U U Qual	50 50 50 8DL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0 1.0	50 50 10/18/00 Result mg/kg 11.000 4.7 79 0.50 0.50 5,100 19 6.4 15,000 6.3 4,500	U Qual U	8DL 10 10 2.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 1.0 1.0
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44 16 20,000 1110 7,300 300	U Qual	50 RDL 10 0.0 0.50 0.50 15 1.0 1.0 5.0 2.0 10 10	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 17,000 36 15 27,000 13 12,000 860 0.15	U U U U U U U U U U U U U U U U U U U	50 50 50 20 4.0 2.0 1.0 1.0 2.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	50 50 10/13/00 Result mg/kg 14,000 2,2 150 0.50 2,200 25 9,4 21,000 6,5 6,000 440 0.020	U U U M-HA U U M-HA M-HA M-HA	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 2.0 1.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	50 50 10/16/00 Result mg/kg 21,000 4.0 190 1.0 3.600 30 9.6 27,000 7.3 6,700 500	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3 RL-3 RL-3 RL-3 RL-3 RL-3	500 500 500 200 200 1.00 300 2.00 2.00 4.00 200 2.00 0.40	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 10 23,000 7.2 11,000 380 1.8	U U Qual U U U	50 50 50 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0 10 1.0	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000 6.6 6,800 500 0.29	U U Qual	50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 1.0 0.50 1.0 0.50 1.0 0.50 0.5	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2 9,800 550 0.15	U U Qual	50 50 50 10 2.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 1.0 0.020	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50 3,900 16 4.9 13,000 5.0 4,300 200	U U U Qual	50 50 50 10 10 2.0 0.50 0.50 15 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 10/18/00 Result mg/kg 11.000 4.7 79 0.50 0.50 5,100 19 6.4 15,000 6.3 4,500 210	U Qual U	50 RDL 10 10 2.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 0.020
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44 16 20,000 110 7,300 300 0.11	U U	50 RDL 10 10 2.0 0.50 0.50 15 1.0 1.0 5.0 2.0 10 0.020	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 1.0 17,000 36 15 27,000 13 12,000 860 0.15	U U U Qual RL-3, R	\$50 \$50 \$20 \$20 \$4.0 \$2.0 \$1.0 \$1.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2	50 50 10/13/00 Result mg/kg 14,000 2,2 150 0,50 2,200 25 9,4 21,000 6,55 6,000 440 0,020	U U U U M-HA U U M-HA M-HA M-HA	500 500 500 8DL 100 200 0.500 0.500 15 1.00 1.00 2.00 1.00 0.020 1.00	50 50 10/16/00 Result mg/kg 21,000 1.00 1.00 3.600 30 9.6 27,000 7.3 6,700 500 8.1	U U U U U U U U U U U U U U U U U U U	500 500 500 200 4.00 1.00 300 2.00 4.00 2.00 2.00 0.40 2.00	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 17,000 35 10 23,000 7.2 11,000 380 1.8	U U U U U U U U U U U U U U U U U U U	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 4,600 28 9.2 22,000 6.6 6,800 500 0.29	U U Qual	50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 0.50 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2 9,800 550 0.15	U U Qual	50 50 50 10 10 2.0 0.50 1.0 1.0 5.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/18/00 Result mg/kg 9,500 10 3.2 72 0.50 0.50 3,900 16 4.9 13,000 5.0 4,300 200 0.030	U U U U U U U U U U U U U U U U U U U	50 50 50 8DL 10 2.0 1.0 0.50 1.5 1.0 1.0 2.0 1.0 1.0 0.50 1.0 0.50 1.0 0.50 1.0 0.0 1.0 0.0 0.0 0.0 0.0 0.	50 50 10/18/00 Result mg/kg 11.000 4.7 79 0.50 0.50 5,100 19 6.4 15,000 6.3 4,500 210 0.022	Qual U U U	50 RDL 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 0.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Sclenjum	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44 16 20,000 110 7,300 300 0.11	U U	50 RDL 10 10 2.0 0.50 0.50 15 1.0 1.0 5.0 2.0 10 1.0 0.020	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 1.7,000 36 15 27,000 13 12,000 860 0.15 32 4.0	U U U U U U U U U U U U U U U U U U U	\$50 \$50 \$50 20 20 20 1.0 1.0 30 2.0 2.0 4.0 2.0 4.0 2.0 2.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	50 50 10/13/00 Result mg/kg 14,000 10 2,2 150 0,50 2,200 25 9,4 21,000 400 0,020 18 2,0	U U U U U U M-HA M-HA U U U U U U U U U U U U U U U U U U U	50 50 50 8DL 10 10 20 0.50 0.50 15 1.0 1.0 2.0 10 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 50 50 10/16/00 Result mg/kg 21,000 4.0 190 1.0 3.600 30 9.6 27,000 7.3 6,700 8.1 23	U U U Qual RL-1 RL-3,U RL-3,U RL-3,U RL-3,U RL-3 RL-3 RL-3 RL-3 RL-3 RL-3	500 500 500 500 200 2.00 1.00 300 2.00 2.00 2.00 2.00 2.00 4.00 2.00 4.00 2.00 4.00 2.00 2.00 3.00 3.00 3.00 3.00 4.00	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 10 23,000 7.2 11,000 380 1.8 2.6 2.0	U U Qual U U U	50 50 50 70 8 RDL 10 0.50 0.50 1.0 1.0 2.0 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 4,600 28 9.2 22,000 6.6 6,800 0.29 20 20	U U Qual	50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 1.0 0.50 1.0 0.50 1.0 0.50 0.5	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2 9,800 550 0.15 25	U U Qual	50 50 50 10 2.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 1.0 0.020	50 50 50 10/18/00 Result mg/kg 9,500 10 3.2 72 0.50 0.50 0.50 4.9 13,000 5.0 4,300 200 0.030 12	U U U Qual	50 50 50 8DL 10 10 2.0 1.0 0.50 1.0 1.0 0.50 1.0 1.0 0.0 0	50 50 10/18/00 Result mg/kg 11.000 10 4.7 79 0.50 0.50 0.50 5,100 6.4 15,000 6.3 4,500 210 0.022 15	U Qual U	50 RDL 10 10 2.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 0.020
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Sclenium Sodium	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44 16 20,000 110 7,300 300 0.11 22 2.0 510	U U U BI	50 RDL 10 10 2.0 0.50 0.50 15 1.0 1.0 5.0 2.0 10 0.020	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 1.0 17,000 36 15 27,000 13 12,000 860 0.15 32 4.0 1,300	U U U U U U U U U U U U U U U U U U U	\$50 \$50 \$20 \$20 \$4.0 \$1.0 \$30 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2	50 50 10/13/00 Result mg/kg 14,000 10 2.2 150 0.50 2.200 25 9.4 21,000 6.5 6,000 440 0.020 18 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 10 10 10 0.50 0.50 1.0 1.0 0.0 2.0 10 0.0 10 10 10 0.50 10 10 10 10 10 10 10 10 10 1	50 50 50 10/16/00 Result mg/kg 21,000 4.0 1.0 1.0 3.600 30 9.6 27,000 7.3 6,700 500 8.1 23 4.0	U U U U U U U U U U U U U U U U U U U	500 500 500 200 200 2.00 1.00 2.00 2.00 2.00 2.00	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 110 23,000 7.2 11,000 380 1.8 26 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 10 10 2.0 0.50 0.50 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1.	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000 6.6 6,800 500 0.29 20 350	U U U U U U U U U U U U U U U U U U U	50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 0.50 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2 9,800 550 0.15 25 22	U U	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0 10 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50 0.50 4,900 200 0.030 12 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 8DL 10 1.0 0.50 0.50 1.0 1.0 1.0 0.0 1.0 1.0 1.0 1.	50 50 10/18/00 Result mg/kg 11.000 4.7 79 0.50 0.50 5,100 19 6.4 15,000 6.3 4,500 210 0.022 15 2.0	Qual U U U U	50 RDL 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 0.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium Thallium	50 10/9/00 Result mg/kg 16,000 7.0 650 0.50 0.96 15,000 44 16 20,000 110 7,300 300 0.11 22 2.0 510	U U	50 RDL 10 2.0 1.0 0.50 0.50 15 1.0 5.0 2.0 10 1.0 0.020 1.0 0.020 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 17,000 15 27,000 13 12,000 860 0.15 32 4.0 1,300 20	U U U U U U U U U U U U U U U U U U U	\$50 \$50 \$20 20 4.0 2.0 1.0 30 2.0 2.0 2.0 2.0 2.0 2.0 4.0 2.0 4.0 2.0 4.0 2.0 2.0 4.0 2.0 2.0 4.0 2.0 2.0 4.0 2.0 2.0 4.0 2.0 4.0 2.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	50 50 10/13/00 Result mg/kg 14,000 10 2.2 150 0.50 2.200 2.5 9.4 21,000 440 0.020 18 2.00 410	U U U U U U U U U U U U U U U U U U U	50 50 50 10 10 10 0.50 0.50 1.0 1.0 0.20 10 1.0 0.20 10 1.0 10 10 10 10 10 10 10 10 10 1	50 50 10/16/00 Result mg/kg 21,000 4.0 1.0 1.0 3.600 3.600 7.3 6,700 500 8.1 23 4.0 480	U U U U U U U U U U U U U U U U U U U	500 500 500 200 200 1.00 1.00 2.00 2.00 2.00 2.00	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 110 23,000 7.2 11,000 380 1.8 26 2.0 710	U U U U U U U U U U U U U U U U U U U	50 50 50 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0 10 1.0 0.040 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000 6.6 6,800 500 0.29 20 2.0 3.50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0 1.0 0.00 1.0 1.0 1.0 1.0 1.0	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 111 27,000 8.2 9,800 550 0.15 25 22,22 550	U U Qual	50 50 50 10 10 2.0 1.0 0.50 1.0 1.0 5.0 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/18/00 Result mg/kg 9,500 10 3.2 72 0.50 0.50 0.50 3,900 16 4.9 13,000 5.0 4,300 200 0.030 12 2.0 410 10	U U U U U U U U U U U U U U U U U U U	500 500 500 100 100 0.500 0.500 1.00 1.0	50 50 10/18/00 Result mg/kg 11.000 10 4.7 79 0.50 5.50 5.100 6.4 15,000 6.3 4,500 210 0.022 15 2.0 480	Qual U U U	8DL 10 10 10 10 10 10 10 10 10 10 10 10 10
Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Fron Cead Adagnesium Adagnesium Adenganese Aercury licket Gelenium odium	50 10/9/00 Result mg/kg 16,000 10 7.0 650 0.50 0.96 15,000 44 16 20,000 110 7,300 300 0.11 22 2.0 510	U U U BI	50 RDL 10 10 2.0 0.50 0.50 15 1.0 1.0 5.0 2.0 10 1.0 0.020	50 50 10/11/00 Result mg/kg 23,000 20 7.1 220 1.0 17,000 36 15 27,000 13 12,000 860 0.15 32 4.0 1,300 20 59	U U U U U U U U U U U U U U U U U U U	\$50 \$50 \$20 \$20 \$4.0 \$1.0 \$30 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$4.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2.0 \$2	50 50 10/13/00 Result mg/kg 14,000 10 2.2 150 0.50 2.200 25 9.4 21,000 6.5 6,000 440 0.020 18 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 10 10 10 0.50 0.50 1.0 1.0 0.0 2.0 10 0.0 10 10 10 0.50 10 10 10 10 10 10 10 10 10 1	50 50 10/16/00 Result mg/kg 21,000 4.0 1.0 1.0 3.600 3.600 7.3 6,700 500 8.1 23 4.0 480	U U U U U U U U U U U U U U U U U U U	500 500 500 200 200 1.00 1.00 2.00 2.00 2.00 2.00	50 50 50 10/15/00 Result mg/kg 20,000 10 13 130 0.50 0.50 17,000 35 110 23,000 7.2 11,000 380 1.8 26 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 10 10 2.0 0.50 0.50 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1.	50 50 50 10/15/00 Result mg/kg 19,000 10 3.3 140 0.50 0.50 4,600 28 9.2 22,000 6.6 6,800 500 0.29 20 350	U U U U U U U U U U U U U U U U U U U	50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 0.50 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1	50 50 50 10/15/00 Result mg/kg 22,000 10 3.1 150 0.52 0.50 6,200 33 11 27,000 8.2 9,800 550 0.15 25 22	U U	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0 10 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/18/00 Result mg/kg 9,500 10 3,2 72 0.50 0.50 0.50 4,900 200 0.030 12 2.0	U U U U U U U U U U U U U U U U U U U	50 50 50 8DL 10 1.0 0.50 0.50 1.0 1.0 1.0 0.0 1.0 1.0 1.0 1.	50 10/18/00 Result mg/kg 11.000 10 4.7 79 0.50 0.50 5,100 6.3 4,500 210 0.022 15 2.0 480 10 30	Qual U U U U	RDL 100 100 100 100 100 100 100 100 100 10

- Notes: A-01 = Sample used for MS/MSNotes:

 B1 = Sodium was detected in the C1 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131 C2 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Verification verifi

Polychlorinated Biphenyls, Pesticides, and Metals Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

Sample Location	Parcel 12		[Parcel 11		T	Parcel 11	·	T	Parcel 11	T		Parcel 24			Parcel 24		T	Parcel 30	Ι	1	Parcel 30	Page	
Sample Number	WDI-SB-DI	P. 20-7	20	WDI-SB-DI	P-22-8		WDI-SB-D	PFD-22-8	 	WDI-SB-D	P-22-3		WDI-SB-D	P-24-9		WDI-SB-D	P-24-	15	WDI-SB-D	P-25-10		WDI-SB-D	P-25-2	0
Sample Type	Native	201	Ī	Waste	-220	 	Waste	1	_	Fill	1		Waste	1		Native		ï	Waste	1-23.10	 	Native	<u> </u>	ř
Sample Depth	20			8		 	8		+	3		 	9			15		 	10	 	+	20	<u> </u>	
Sample Depth	10/10/00			10/10/00		 	10/10/00		†	10/10/00			10/12/00			10/12/00		 - -	10/12/00	-	 	10/12/00		<u> </u>
Laboratory	Del Mar An	alutic	l	Del Mar An	alutical	 	Del Mar Ar	alytical	 	Del Mar Ar	alvtical		Del Mar Ar	alvical		Del Mar Ar	alutic	<u></u>	Del Mar An	alvucal	+	Del Mar Ar	alvtic	L
Lab Sample ID	1330315-05	alync	1	1110315-06	aryucai		1JJ0315-07	T T	· · · · ·	JJ0315-08		-	1JJ0445-06	latytical		1JJ0445-07		1	1330445-08		 	IJJ0445-09	· · ·	-
	+					 	10/15/00		 	10/24/00	l		10/19/00			10/19/00		 	10/20/00		-	10/19/00		-
Analysis Date	10/15/00	0 1	D D 1	10/19/00	01	DDI		Qual	RDL		01	RDL	Result	0	RDL		-	DDI		· · · · · · · · · · · · · · · · · · ·	DD1		Qual	D D I
		Qual	KDL		Qual	RDL	Result	Quar	KDL	Result	Qual	KUL		Qual	KDL	Result	Quai	RDL	Result	Qual	RDL		Quai	KDI
44: 000	ug/kg		-	ug/kg		<u> </u>	ug/kg	D1 111	-	ug/kg	U	-	ug/kg			ug/kg			ug/kg	1		ug/kg		_
4,4'-DDD	5.0	U	5.0			50			50		<u> </u>	50	5.0		5.0			5.0	+	A-01.U				5
4.4'-DDE	5.0	U	5.0	 		50		RL-1,C2,U	50			50	5.0		5.0			5.0		A-01,U	10			5
4,4'-DDT	5.0	U	5.0		C2	50		RL-1,C2,U	50			50			5.0			5.0		A-01.U	+		1	5
Aldrin	5.0	U	5.0		U	50			50			50	5.0		5.0			5.0		A-01.U		\		5
alpha-BHC	5.0	U	5.0		U	50			50		U	50	5.0		5.0			5.0		A-01,U	10		_	5
beta-BHC	5.0	U	5.0		υ	50			50			50	5.0		5.0			5.0		A-01,U	+			5
Chlordane	50	U	50		U	500		RL-1,U	500	500	U	500	50	U	50	+		50		A-01.U	+		-	
delta-BHC	10	U	10		U	100		RL-1,U	100	100	υ	100	10		10			10		A-01,U		1	-	
Dieldrin	5.0	U	5.0		U	50			50		U	50	5.0		5.0			5.0		A-01,U				5
Endosulfan i	5.0	U	5.0	+	U	50			50	50		50	5.0		5.0			5.0		A-01,U	+			5
Endosulfan II	5.0	U	5.0		U	50			50		U_	50	5.0		5.0			5.0	+	A-01,U	_	-		5
Endosulfan sulfate	10	$\overline{}$	10	100	U	100			100	100	U	100	10	U	10			10		U,10-A	20	+		1
Endrin	5.0	U	5.0		U	50			50			50	5.0		5.0			5.0		A-01.U	10			5.
Endrin aldehyde	5.0		5.0	++	U	50			50	50	U	50	5.0		5.0			5.0		A-01,U	10		_	5.
Endrin ketone	5.0	U	5.0	50	U	50			50	50	U	50	5.0	U	5.0			5.0		A-01,U	10			5.
gamma-BHC (Lindanc)	5.0	Ų.	5.0	50	U	50	50	RL-1,U	50	50	U_	50	5.0	U	5.0	5.0		5.0	10	A-01,U	10	5.0		5.
Heptachlor	5.0	Ų	5.0	50	U	50	50	RL-1,U	50	50	U	50	5.0	U	5.0	5.0	U	5.0	10	A-01,U	10	5.0	U	5.
Heptachlor epoxide	5.0	U	5.0	50	U	50	50	RL-1,U	50	50	U_	50	5.0	υ	5.0	5.0	U	5.0	10	A-01.U	10	5.0	_	5.
Methoxychlor	5.0	U	5.0	50	C2,U	50	50	RL-1,C2,U	50	50	U	50	5.0	υ	5.0	5.0		5.0	10	A-01,U	10			5.
Toxaphene	200	U	200	2,000	U	2,000	2,000	RL-1,U	2,000	2,000	U	2,000	200	U	200	200	U	200	400	A-01,U	400	200	U	20
Analysis Date	10/12/00			10/12/00		L	10/12/00			10/12/00			10/24/00			10/20/00			10/20/00			10/20/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
	ug/kg]		ug/kg			ug/kg		1	ug/kg		L	ug/kg			ug/kg	L		ug/kg			ug/kg		
Aroclor 1016	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50	50		50			50	50	-	5
Aroclor 1221	50	U	50	50	U	50	50	U	50	50	D	50	50	U	50			50	50	υ	50		-	5
Aroclor 1232	50	U	50	50	U	50	50	U	50	50	U	50	50	U	50			50	50	U	50		$\overline{}$	5
Aroclor 1242	50	U	50	50	Ų	50	50	U	50	50.	U	60	50	U	50	50	U	50	50	U	50	50	U	5
Aroclor 1248	50	U	50	50	U						17	50											T	5
Aroclor 1254						50	50	U	50	50	Ü	50	50	U	50	50	U	50	50	U	50	50	U	
ATOCIOI 1234	50	Ü	50	50	U	50		U	50					U U	50 50			50 50			50 50			5
Aroclor 1260	50 50	U	50 50	50 50		 	50		+	50	U	50	50			50	U		50	U		50	U	5
		$\overline{}$			U	50	50	U	50	50 50	U	50 50	50 50	U	50	50	U	50	50	Ū Ū	50	50	U	
Aroclor 1260	50 10/18/00	$\overline{}$	50	50 10/18/00	U	50	50 50	U	50	50 50 50	U	50 50 50	50 50 50	Ü	50	50 50	U	50 50	50 50	Ū Ū	50	50 50	U	5
Aroclor 1260	50 10/18/00	U	50	50 10/18/00	U	50	50 50 10/18/00	U U	50	50 50 50 10/18/00	U U U	50 50 50	50 50 50 10/23/00	Ü	50	50 50 10/23/00	U	50 50	50 50 10/23/00	Ų	50	50 50 10/23/00	U	5
Aroclor 1260	50 10/18/00 Result	U	50	50 10/18/00 Result	U	50	50 50 10/18/00 Result	U U	50	50 50 50 10/18/00 Result	U U U	50 50 50	50 50 50 10/23/00 Result	Ü	50	50 50 10/23/00 Result	U	50 50	50 50 10/23/00 Result	Ų	50	50 50 10/23/00 Result mg/kg	U	5
Aroclor 1260 Analysis Date Aluminum	50 10/18/00 Result mg/kg	U	50 RDL	50 10/18/00 Result ing/kg	U	50 50 RDL	50 50 10/18/00 Result mg/kg	U U	50 50 RDL	50 50 50 10/18/00 Result mg/kg	U U U	50 50 50 RDL	50 50 50 10/23/00 Result mg/kg	U U Qual	50 50 RDL	50 50 10/23/00 Result ing/kg	U U Qual	50 50 RDL	50 50 10/23/00 Result mg/kg	U U Qual	50 50 RDL	50 50 10/23/00 Result mg/kg 11,000	U U Qual	RDI
Aroclor 1260 Analysis Date Aluminum Antimony	50 10/18/00 Result mg/kg 16,000	U Qual	50 RDL	50 10/18/00 Result mg/kg 15,000	U U Qual	50 50 RDL	50 50 10/18/00 Result mg/kg 16,000	U U Qual	50 50 RDL	50 50 50 10/18/00 Result mg/kg 14,000	U U U Qual	50 50 50 RDL	50 50 50 10/23/00 Result mg/kg 9,200	U U Qual RL-3	50 50 RDL	50 50 10/23/00 Result ing/kg 19,000	U U Qual	50 50 RDL	50 50 10/23/00 Result mg/kg 20,000	U U Qual	50 50 RDL	50 50 10/23/00 Result mg/kg 11,000	U U Qual	RDI
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic	50 10/18/00 Result mg/kg 16,000	U Qual	50 RDL 10	50 10/18/00 Result ing/kg 15,000	U U Qual	50 50 RDL 10	50 50 10/18/00 Result mg/kg 16,000	U U Qual	50 50 RDL	50 50 50 10/18/00 Result mg/kg 14,000	U U U Qual	50 50 50 RDL	50 50 50 10/23/00 Result mg/kg 9,200 20	U U Qual RL-3 RL-3,U	50 50 RDL 20 20	50 50 10/23/00 Result ing/kg 19,000	U U Qual	50 50 RDL 10	50 50 10/23/00 Result ing/kg 20,000	U U Qual	50 50 RDL	50 50 10/23/00 Result mg/kg 11,000	U U Qual	RDI
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium	50 10/18/00 Result mg/kg 16,000 10 5.3	U Qual	50 RDL 10 10 2.0	50 10/18/00 Result ing/kg 15,000 10 5.6	U U Qual	50 50 RDL 10 10 2.0	50 50 10/18/00 Result mg/kg 16,000 10 5.2	U U Qual	50 50 RDL 10 10	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5	U U U Qual	50 50 50 RDL 10 10	50 50 50 10/23/00 Resuh mg/kg 9,200 20 6,9	U Qual RL-3 RL-3,U RL-3	50 50 RDL 20 20 4.0	50 50 10/23/00 Result ing/kg 19,000	U U Qual	50 50 RDL 10 10	50 50 10/23/00 Result ing/kg 20,000 10 2.7	U U Qual	50 50 RDL 10 10 2.0	50 50 10/23/00 Result mg/kg 11,000	U U Qual	RDI
Aroclor 1260 Analysis Date	50 10/18/00 Result mg/kg 16,000 10 5.3	U Qual	50 RDL 10 10 2.0	50 10/18/00 Result ing/kg 15,000 10 5.6	U U Qual U	50 50 RDL 10 10 2.0	50 50 10/18/00 Result mg/kg 16,000 10 5,2	U U Qual	50 50 RDL 10 10 2.0	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5	U U U Qual	50 50 50 RDL 10 2.0	50 50 50 10/23/00 Result mg/kg 9,200 20 6,9 120	U U Qual RL-3 RL-3,U RL-3 RL-3	50 50 RDL 20 20 4.0 2.0	50 50 10/23/00 Result ing/kg 19,000 10 12	U U Qual	50 50 RDL 10 2.0	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160	U U Qual	50 50 RDL 10 10 2.0	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94	U U Qual U	RDI
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50	U Qual U	50 RDL 10 10 2.0 1.0 0.50	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71	U U Qual U	50 50 RDL 10 10 2.0 1.0	50 50 10/18/00 Result mg/kg 16.000 10 5.2 110	U U Qual	50 50 RDL 10 10 2.0 1.0	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130	U U U Qual	50 50 50 RDL 10 2.0 1.0	50 50 50 10/23/00 Result mg/kg 9,200 20 6,9 120	U Qual RL-3,U RL-3 RL-3,U RL-3,U RL-3,U	50 50 RDL 20 20 4.0 2.0	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51	U U Qual	50 50 RDL 10 2.0 1.0 0.50	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53	U U Qual	50 50 RDL 10 10 2.0 1.0	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50	U U Qual U	RDI 1 1 2 1. 0.5
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 0.50	U Qual U	50 RDL 10 10 2.0 1.0	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71	U U Qual U	50 50 RDL 10 10 2.0 1.0	50 50 10/18/00 Result mg/kg 16,000 10 5.2 110 0.50	U U Qual	50 50 8DL 10 10 2.0 1.0 0.50 0.50	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50	U U U Qual	50 50 50 RDL 10 2.0 1.0 0.50	50 50 50 10/23/00 Result mg/kg 9,200 6.9 120 1.0	U Qual RL-3,U RL-3 RL-3,U RL-3,U RL-3,U	50 50 RDL 20 20 4.0 2.0 1.0	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51	U U Qual	50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53	U U Qual	50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50	U U Qual U U U	RDI 1 1 2 1. 0.5
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 0.50 2,000	U Qual U	50 RDL 10 10 2.0 1.0 0.50 0.50	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000	U U Qual U	50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 10/18/00 Result mg/kg 16,000 10 5.2 110 0.50 0.67	U U Qual	50 50 8DL 10 10 2.0 1.0 0.50 0.50	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50	U U U Qual	50 50 50 RDL 10 2.0 1.0 0.50 0.50	50 50 50 10/23/00 Result mg/kg 9,200 20 6.9 120 1.0 77,000	U U U Qual RL-3.U RL-3.	50 50 RDL 20 20 4.0 2.0 1.0 30	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000	U U Qual	50 50 RDL 10 2.0 1.0 0.50 0.50	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600	U U Qual	50 50 RDL 10 10 2.0 1.0 0.50 0.50	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400	U Qual U U U U U	RD1 1 2 1. 0.5 0.5
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 0.50 2,000	U Qual U	50 RDL 10 2.0 1.0 0.50 0.50 1.0 1.0	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000	U U Qual U	50 50 RDL 10 2.0 1.0 0.50 0.50 1.5	50 50 10/18/00 Result mg/kg 16,000 10 5.2 110 0.50 0.67 13,000	U U Qual	50 50 8DL 10 10 2.0 0.50 0.50 15 1.0	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000	U U U Qual	50 50 50 RDL 10 2.0 1.0 0.50 0.50 1.0	50 50 50 10/23/00 Result mg/kg 9,200 20 6.9 1.0 1.0 77,000 19	U U U Qual RL-3, U RL-3, U RL-3, U RL-3, U RL-3, U RL-3, RL-3 RL-3, RL-3, RL-3	50 50 RDL 20 4.0 2.0 1.0 30 2.0 2.0	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 38	U U Qual	50 50 RDL 10 2.0 1.0 0.50 0.50 15 1.0	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600	U U Qual	50 50 RDL 10 2.0 1.0 0.50 0.50 1.0	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 26 6.4	U Qual U U U U U	1 1 2 1 0.5 0.5
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 0.50 2,000 20 6.9	U Qual U	50 RDL 10 2.0 1.0 0.50 0.50 15	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000 26 8.9	U U Qual U	50 50 8DL 10 2.0 1.0 0.50 0.50 15 1.0	50 50 10/18/00 Result mg/kg 16.000 10 5.2 110 0.50 0.67 13,000 27 7.6	U U Qual	50 50 8DL 10 10 2.0 0.50 0.50 15 1.0	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000 22 8.9	U U U Qual	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 50 50 10/23/00 Result mg/kg 9,200 20 6,9 120 1.0 1.0 77,000 19 2.5 8,900	U U U Qual RL-3 RL-3.U RL-3 RL-3.U RL	50 50 8DL 20 4.0 2.0 1.0 30 2.0 2.0 1.0	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 38 13 26,000	U U Qual	50 50 10 10 2.0 1.0 0.50 0.50 15 1.0 1.0 5.0	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600 29	U U Qual	50 50 RDL 10 2.0 0.50 0.50 15	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 26 6.4 19,000	U Qual U U U U U	RDI 1 2 0.55 0.55
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt ron	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 0.50 2,000 2,000 6.9 19,000	U Qual U	50 RDL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000 26 8.9 20,000 6.5	U U Qual U	50 50 8DL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 50 10/18/00 Result mg/kg 16,000 10 5.2 110 0.50 0.67 13,000 27 7.6 19,000	U U Qual	50 50 RDL 10 10 2.0 0.50 0.50 15 1.0 5.0	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 0.50 22 8.9 20,000	U U U Qual	50 50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 50 10/23/00 Result mg/kg 9,200 20 6,9 120 1.0 77,000 19 2.5 8,900	U U U Qual RL-3 RL-3.U RL-3 RL-3.U RL-3.U RL-3.U RL-3.RL-3.U RL-3 RL-3 RL-3 RL-3 RL-3 RL-3	50 50 RDL 20 4.0 2.0 1.0 30 2.0 2.0 1.0 4.0	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 38 13 26,000	U U Qual	50 50 10 10 2.0 1.9 0.50 0.50 15 1.0 1.0 5.0 2.0	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0	U U Qual	50 50 8DL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 26 6.4 19,000	U Qual U U U U U	RDI 1 2 1 0.55
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Tadmium Talcium Thromium Tobalt Tron Lead Magnesium	50 10/18/00 Result mg/kg 16,000 5.3 110 0.50 0.50 2,000 20 6.9 19,000 11 4,900	U Qual U	50 RDL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0 10	50 10/18/00 Result mg/kg 15,000 5.60 110 0.50 0.71 11,000 26 8.9 20,000 6.5 7,500	U U Qual U	50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 10/18/00 Result mg/kg 16.000 5.2 110 0.50 0.67 13.000 27 7.6 19,000 6.6 7,600	U U Qual	50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000 22 8.9 20,000 15	U U U Qual	50 50 50 50 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0	50 50 50 10/23/00 Result mg/kg 9,200 6,9 120 1.0 77,000 19 2.5 8,900 35 5,100	U U U U U U U U U U U U U U U U U U U	50 50 8DL 20 4.0 2.0 1.0 30 2.0 2.0 10 4.0 2.0	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 38 13 26,000 10	U U Qual	50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0 6,000	U U Qual	50 50 8DL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 26 6.4 19,000 4.5	U Qual U U U U U	RDI 22 11 0.5 0.5 11 11 55 22
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt ron Cead Magnesium Manganese	50 10/18/00 Result mg/kg 16,000 5.3 110 0.50 0.50 2,000 20 6.9 19,000 11 4,900 610	U Qual	50 RDL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0 10	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000 26 8.9 20,000 6.5 7,500	U U U U U	50 50 10 10 2.0 1.0 0.50 0.50 1.0 5.0 2.0 1.0	50 50 10/18/00 Result mg/kg 16,000 5,2 110 0,50 0,67 13,000 27 7,6 19,000 6,6 7,600	U U Qual	50 50 8DL 10 10 2.0 0.50 0.50 15 1.0 1.0 2.0 2.0 10	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000 22 8.9 20,000 15 9,100	U U U Qual	500 500 500 100 100 2.00 0.500 0.500 1.00 5.00 2.00 1.00	50 50 50 10/23/00 Result mg/kg 9,200 6,9 120 1.0 77,000 19 2.5 8,900 35 5,100 170	U U U U U U U U U U U U U U U U U U U	50 50 8DL 20 20 1.0 1.0 30 2.0 10 4.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 38 13 26,000 10 15,000	U U Qual	50 50 10 10 2.0 0.50 0.50 1.0 1.0 5.0 2.0 1.0	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0 6,000	U U Qual	50 50 10 10 2.0 1.0 0.50 0.50 1.0 5.0 2.0 1.0	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 26 6.4 19,000 4.5 5.600	U U U U U U U U U U U U U U U U U U U	22 11 0.5 0.5 1 1 1 5 2
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Tadmium Talcium Thromium Obalt ron Lead Lead Lead Lead Lead Lead Lead Lead	50 10/18/00 Result mg/kg 16,000 10 5.3 1110 0.50 2,000 20 6.9 19,000 111 4,900 610 0.053	U Qual	10 10 2.0 0.50 0.50 15 1.0 2.0 1.0 1.0 0.0 2.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000 26 8.9 20,000 6.5 7,500 320 0.033	U U U U U	500 500 100 100 2.0 0.500 0.500 1.0 5.0 2.0 10 1.0 0.020	50 50 10/18/00 Result mg/kg 16,000 5,2 110 0,50 0,67 13,000 27 7,6 19,000 6,6 7,600 270	U U Qual	50 50 8DL 10 10 2.0 0.50 0.50 15 1.0 1.0 2.0 10 1.0 0.020	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000 22 8.9 20,000 15 9,100 410 0.13	U U U Qual	500 500 500 RDL 100 2.00 0.500 0.500 1.00 1.00 1.00 1.00 0.020	50 50 50 10/23/00 Result mg/kg 9,200 6,9 120 1.0 77,000 19 2.5 8,900 35 5,100 170 0.053	U U U U U U U U U U U U U U U U U U U	500 500 200 200 2.00 1.00 300 2.00 2.00 4.00 2.00 2.00 2.00 2.00 2.	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 38 13 26,000 730 0.12	U U Qual	50 50 10 10 2.0 0.50 0.50 1.0 5.0 2.0 1.0 0.020	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0 6,000 540	U U Qual	50 50 8DL 10 2.0 1.0 0.50 0.50 1.0 5.0 2.0 1.0 0.020	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 26 6.4 19,000 4.5 5,600 240	U U U U U U U U U U U U U U U U U U U	2 1 0.5 0.5 1 1 5 2 1 0.00
Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Fadmium Falcium Fromium Obalt Fron Lead Augnessuin Aanganese Aercury Nickel	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 2,000 20 6.9 19,000 11 4,900 610 0.053	U Qual	10 10 2.0 0.50 0.50 1.0 5.0 2.0 1.0 0.020	50 10/18/00 Result mg/kg 15,000 10 5.6 1110 0.50 0.71 11,000 26 8.9 20,000 6.5 7,500 320 0.033	U U U U	500 500 100 100 1.00 0.500 0.500 1.00 1.	50 50 10/18/00 Result mg/kg 16,000 5,2 110 0,50 0,67 13,000 27 7,6 19,000 6,6 7,600 270 0,051	U U Qual	50 50 8DL 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 10 1.0 1.0 1.0 1.0	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000 22 8.9 20,000 15 9,100 410 0.13	U U Qual	500 500 500 RDL 100 2.00 0.500 0.500 1.00 1.00 1.00 1.00 0.020 1.00	50 50 50 10/23/00 Result mg/kg 9,200 6.9 120 1.0 77,000 19 2.5 8,900 35 5,100 170 0.053 8,3	U U U U U U U U U U U U U U U U U U U	500 500 RDL 200 2.00 1.00 300 2.00 100 4.00 2.00	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 13 26,000 10 15,000 730 0.12	U U Qual	50 50 10 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0 1.0 1.0 0.0 2.0 1.0	50 50 10/23/00 Result mg/kg 20.000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0 6,000 540 0.027	U U Quat	S0 S0 S0 S0 S0 S0 S0 S0	50 50 10/23/00 Result mg/kg 11,000 5.8 94 0.50 0.50 4,400 26 6.4 19,000 4.5 5,600 240 0.14	U U Qual	2 1 0.5 0.5 2 1 1 0.02
Aroclor 1260 Analysis Date Analysis Date Adminim Arsenic Asarium Arryllium Adminim	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 2,000 20 6.9 19,000 11 4,900 610 0.053 17 2.0	U Qual	10 10 2.0 0.50 0.50 1.0 2.0 1.0 0.0 1.0 0.020 1.0	50 10/18/00 Result mg/kg 15,000 10 5.6 1110 0.50 0.71 11,000 26 8.9 20,000 6.5 7,500 320 0.033 19 2.0	U U U U U	500 500 100 100 2.00 0.500 0.500 1.00 1.00 2.00 1.00 0.020 1.00 2.00	50 50 10/18/00 Result mg/kg 16.000 10 5.2 110 0.50 0.67 13.000 27 7.6 19,000 6.6 7.600 270 0.051 19	U U Qual	50 50 10 10 2.0 1.0 0.50 0.50 1.0 2.0 1.0 2.0 1.0 2.0 1.0 2.0 1.0 2.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000 22 8.9 20,000 15 9,100 410 0.13 17 2.0	U U U Qual	500 500 500 RDL 100 1.00 0.500 1.00	50 50 50 10/23/00 Result mg/kg 9,200 6,9 120 1.0 77,000 19 2.5 8,900 35 5,100 170 0.053 8,3	U U U U U U U U U U U U U U U U U U U	500 500 RDL 20 20 4.0 1.0 1.0 2.0 2.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 13 26,000 10 15,000 730 0.12	U U Qual	50 50 8DL 10 10 2.0 0.50 0.50 1.0 5.0 2.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0	50 50 10/23/00 Result mg/kg 20.000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0 6,000 540 0.027 21	U U Quat	8DL 100 100 100 100 100 100 100 100 100 10	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 26 6.4 19,000 4.5 5,600 240 0.14	U U Qual	2 1 0.: 1 1 5 2 1 0.02 1 2
Aroclor 1260 Analysis Date Arcum Analysis Date A	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 0.50 2,000 20 6.9 19,000 11 4,900 610 0.053 17 2.0	U Qual	50 RDL 10 2.0 0.50 0.50 15 1.0 5.0 2.0 1.0 0.020 1.0 0.020 1.0	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000 26 8.9 20,000 6.5 7,500 320 0.033 19 2.0	U U U	50 50 10 10 10 2.0 0.50 0.50 1.0 5.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0	50 50 10/18/00 Result mg/kg 16,000 10 5.2 110 0.50 0.67 13,000 27 7.6 19,000 6.6 7,600 270 0.051 19	U U	50 50 8DL 10 10 2.0 0.50 0.50 1.0 1.0 2.0 10 1.0 2.0 10 1.0 2.0 10 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 50 50 10/18/00 Result 14,000 10 5.5.5 130 0.50 0.50 0.50 22 8.9 20,000 15 9,100 410 0.13 17 2.0	U U U U U U U U U U U U U U U U U U U	500 500 500 RDL 100 2.00 0.500 1.00 5.00 2.00 100 0.0200 1.0	50 50 50 10/23/00 Result mg/kg 9,200 20 6,9 120 1,0 1,0 1,0 2.5 8,900 35 5,100 170 0.053 8,3 4,0 400	Qual RL-3, U RL-3 RL-3 RL-3 RL-3 RL-3 RL-3 RL-3 RL-3	500 500 RDL 200 2.00 1.00 3.00 2.00 1.00 2.00 2.00 2.00 2.00 2.00 2.00 4.00 2.00	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 13 26,000 10 15,000 730 0.12 39,000	U U U	50 50 10 10 2.0 0.50 0.50 1.0 5.0 2.0 1.0 0.00 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 10/23/00 Result mg/kg 20,000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0 6,000 540 0.027 21 2.0 1,100	U U Qual	S0 S	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 0.50 4,400 26 6.4 19,000 4.5 5,600 240 0.14 18 2.0 460	U U U U U U U U U U U U U U U U U U U	2 1 0.: 1 1 5 2 1 0.02
Aroclor 1260 Analysis Date Analysis Date Adminim Arsenic Asarium Arryllium Adminim	50 10/18/00 Result mg/kg 16,000 10 5.3 110 0.50 2,000 20 6.9 19,000 11 4,900 610 0.053 17 2.0	U Qual	10 10 2.0 0.50 0.50 1.0 2.0 1.0 0.0 1.0 0.020 1.0	50 10/18/00 Result mg/kg 15,000 10 5.6 110 0.50 0.71 11,000 26 8.9 20,000 6.5 7,500 320 0.033 19 2.0	U U U U	500 500 100 100 2.00 0.500 0.500 1.00 1.00 2.00 1.00 0.020 1.00 2.00	50 50 10/18/00 Result mg/kg 16.000 10 5.2 110 0.50 0.67 13.000 27 7.6 19,000 6.6 7.600 270 0.051 19	U U Qual	50 50 10 10 2.0 1.0 0.50 0.50 1.0 2.0 1.0 2.0 1.0 2.0 1.0 2.0 1.0 2.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 10/18/00 Result mg/kg 14,000 10 5.5 130 0.50 0.50 12,000 22 8.9 20,000 15 9,100 410 0.13 17 2.0	U U Qual	500 500 500 RDL 100 1.00 0.500 1.00	50 50 50 10/23/00 Result mg/kg 9,200 20 6,9 120 1,0 1,0 1,0 2.5 8,900 35 5,100 170 0.053 8,3 4,0 400	Qual RL-3, U RL-3, U RL-3, U RL-3, U RL-3, U RL-3, U RL-3 RL-3 RL-3 RL-3 RL-3 RL-3 RL-3 RL-3	500 500 RDL 20 20 4.0 1.0 1.0 2.0 2.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	50 50 10/23/00 Result ing/kg 19,000 10 12 190 0.51 0.50 39,000 13 26,000 10 15,000 730 0.12	U U U	50 50 8DL 10 10 2.0 0.50 0.50 1.0 5.0 2.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0	50 50 10/23/00 Result mg/kg 20.000 10 2.7 160 0.68 0.53 3,600 29 11 24,000 8.0 6,000 540 0.027 21	U U Qual	8DL 100 100 100 100 100 100 100 100 100 10	50 50 10/23/00 Result mg/kg 11,000 10 5.8 94 0.50 0.50 4,400 4,50 5,600 240 0.14 18 2.0 460	U U U U U U U U U U U U U U U U U U U	RD 0. 0. 10. 10. 10. 10. 10. 10. 10. 10.

- Notes: A-01 = Sample used for MS/MSNotes:

 B1 = Sodium was detected in the
 C1 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 51

 R1-1 = Reporting limit raised duc
 R1-3 = Reporting limit raised duc
 U = Constituent not detected above
 U = Constituent not detected above
 U = Constituent not detected above laboratory's reporting limits.

Polychlorinated Biphenyls, Pesticides, and Metals Concentrations in Direct Push Borings Waste Disposal, Inc. Superfund Site

Sample Location	Parcel 30	T -	Τ	Parcel 30	T		Parcel 43		T	Parcel 43	1	Г	Parcel 43	1		Parcel 43	T	T	Parcel 43	T	T	Parcel 43	T	age
Sample Location Sample Number		P-27-1	 	WDI-SB-D	P-27.15	 	WDI-SB-D	P-29-6	+	WDI-SB-D	P-20	20	WDI-SB-D	P.31.5	 	WDI-SB-D	PFD. 11	5	WDI-SB-D	P-31-20	 	WDI-SB-D	P_34.9	+
Sample Type	WDI-SB-DP-27-3 Fill		+		JP-2/-13	₩		P-29-6	+	Native	11-29-	<u>1</u>	Waste	JP-31-3		Waste	T -31-		Native	1-31-20		Waste	1-34-6	4
	3	 		Native 15	 	├	Waste		┼	20	 -		5	 		wasie		-	20	 	—−	Wasie 8	├	+
Sample Depth	_		 	10/13/00	 		10/14/00		+-		1	├	10/14/00	 	-	10/14/00			10/14/00		 	10/20/00	├	+
Sample Date	10/13/00	Ļ.,	+			<u> </u>		L		10/14/00	1	<u> </u>			<u> </u>		1	-		٠,	├		<u> </u>	Ļ
Laboratory	Del Mar Ai	nalytical		Del Mar Ai	, 		Del Mar Ar	nalytical	↓	Del Mar At	, <u> </u>	al	Del Mar Ar			Del Mar Ai	nalytical		Del Mar Ai		ļ	Del Mar Ar	nalytic	:al
Lab Sample 1D	1))0523-01		1	1))0523-02			1330531-05	<u> </u>	├ ──	1110531-06	1		1JJ0531-07	<u> </u>	_	1JJ0531-08		<u> </u>	1330531-09	1	 	1JJ0733-03		4
nalysis Date	10/20/00		ļ	10/19/00			10/19/00		<u> </u>	10/20/00	١	<u>L</u> _	10/20/00	L	L	10/20/00	L	<u> </u>	10/20/00		L	11/3/00	<u> </u>	\perp
	Result Qual		RDL	Result	Qual	RDL.	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	
	ug/kg	<u> </u>	1	ug/kg			ug/kg		L	ug/kg	1	L	ug/kg		<u>. </u>	ug/kg			ug/kg	l	<u> </u>	ug/kg		
r-DDD	100	RL-1,C1,U	100	5.0	υ	5.0	50	RL-1,C1,U	50	5.0	υ	5.0	5.0	U	5.0	10	A-01,U	10	50	RL-1.C1,U	50	5.0	υ	7
1'-DDE	100	RL-1,U	100	5.0	U	5.0	50	RL-1,U	50	5.0	U	5.0	5.0	U	5.0	10	A-01,U	10	50	RL-1,U	50	5.0	U	1
'-DDT	100		100			5.0		RL-1,C2,U	50		*	5.0	5.0	υ	5.0	10	A-01,U	10			50	5.0	U	٦
drin	001		100	+	+	5.0			50			5.0		1	5.0		A-01,U	10			50			-
oha-BHC	100	RL-1.U	100			5.0	+		50			5.0		 	5.0		A-01,U	10			50			-
ta-BHC	100	RL-1,U	100			5.0			50		+	5.0	 	+	5.0		A-01,U	10		RL-I,U	50			_
				50	+			RL-1,U	500			50		+	50		A-01.U	+			500			_
hlordane	1,000	RL-1,U	1,000			50	 		+						 			100		RL-1.U	+			
lta-BHC	200	RL-1,U	200		+	10		RL-1,U	100		+	10		·	10		A-01,U	20		RL-1,U	100			-
eldrin	100		100			5.0			50		+	5.0		+	5.0		A-01.U	10	 		50			_
ndosulfan I	100	RL-I,U	100	5.0		5.0			50			5.0			5.0	10	A-01,U	10			50			_
ndosulfan II	100	RL-1,U	100	5.0	U	5.0	50	RL-1.U	50	5.0	U	5.0	5.0	U	5.0	10	A-01,U	10	50	RL-1,U	50	5.0	-	_
ndosulfan sulfate	200	RL-1,U	200	10	U	10	100	RL-1,U	100	10	υ	10	.10	Lυ	10	20	A-01,U	20	100	RL-1,U	100	10	U	
ndrin	100	RL-1,U	100	5.0	U	5.0	50	RL-1,U	50	5.0	U	5.0	5.0	U	5.0	10	A-01,U	10	50	RL-1,U	50	5.0	υ	_
ndrin aldehyde	100	t — — —	100			5.0	50	RL-1,U	50			5.0	5.0	U	5.0		A-01.U	10	50	RL-1.U	50	5.0	U	Ī
ndrin ketone	100		100	 		5.0		RL-1,C2,U	50			5.0		 	5.0		A-01,U	10		RL-1.C2,U	50		Ū	_
imma-BHC (Lindanc)	100		100			5.0	50		50		+	5.0		+	5.0		A-01,U	10		RL-1.U	50		U	
eptachlor	100	RL-1,U	100		-	5.0	50		50		-	5.0		1	5.0		A-01,U	10		RL-1,U	50		U	_
eptachlor epoxide	100	RL-1,U	100			5.0	50		50		-	5.0		+	5.0		A-01,U	10		RL-1,U	50		Ü	_
			_			5.0	50		50	5.0		5.0		U	5.0			10	50				-	_
ethoxychlor	100	RL-1,C2,U	100					RL-1,C2,U			+						A-01,U			RL-1,C2,U	50		U	_
oxaphene	4,000	RL-1,U	4,000	200	U	200	2,000	RL-1,U	2,000	200	U	200	200	U	200		A-01,U	400	2,000	RL-1.U	2,000	200	υ	_
nalysis Date	10/21/00		 	10/21/00			10/21/00			10/21/00	Ļ	ļ	10/21/00		L	10/20/00	L	—	10/21/00		↓	11/7/00		Ц
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	_
	ug/kg		ļ	ug/kg			ug/kg		L	ug/kg			ug/kg			ug/kg			ug/kg		L	ug/kg		
roclor 1016	50	U	50	50	U_	50	100	RL-3,U	100	50	U	50	50	U	50	50	υ	50	50	U	50	50	U	
roctor 1221	50	U	50	50	U	50	100	RL-3,U	100	50	U	50	50	υ	50	50	U	50	50	U	50	50	U	7
roclor 1232	50	Ü	50	50	U	50	100	RL-3,U	100	50	U	50	50	U	50	50	U	50	50	U	50	50	U	٦
roclor 1242	50	U	50	50	Ú	50	100	RL-3,U	100	50	U	50	50	υ	50	50	U	50	50	U	50		U	1
roclor 1248	50	υ	50			50	100	RL-3,U	100	50		50			50	50	+	50	50	U	50	50	U	1
roclor 1254	50		50			50	100	RL-3,U	100	50		50			50	50		50	50	U	50		Ü	1
roclor 1260	50		50			50		RL-3,U	100	50	_	50	50		50	50		50	50		50	50	υ	_
	+			10/26/00		50		KE-5,C	100	10/25/00	-	- 30	10/26/00		- 50		<u> </u>	- 30	10/26/00		50		<u> </u>	+
nalysis Date	10/26/00		DD:			201	10/26/00	0 1	0.01		0 1	DD1		0 1	001	10/26/00		DD:			001	11/12/00	<u> </u>	+
	Result	Qual	RDL	Result	Qual	RDI.	_	Qual	KDL	Result	Quai	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL		Qual	+
	mg/kg		 	mg/kg			mg/kg		-	ing/kg	-		mg/kg	-		mg/kg			mg/kg			mg/kg		4
luminum	19,000	RL-3	20	22,000		20	18,000	<u>RL</u> -3	20	8,000		10			20	28,000		40	28,000	RL-3	20	14,000		4
ntimony	20	RL-3,U	20	20	RL-3.U	20	20	RL-3.U	20	10	U	10		RL-3,U	20		RL-3,U	40	20	RL-3,U	20	10	<u> </u>	4
rsenie	4.0	RL-3,U	4.0	4.7	RL-3	4.0	4.0	RL-3,U	4.0	3.4	L	2.0	4.0	RL-3,U	4.0	8.0	RL-3,U	8.0	15	RL-3	4.0	4.0		╛
arium	140	RL-3	2.0	130	RL-3	2.0	130	RL-3	2.0	53	L	1.0	190	RL-3	2.0	150	RL-3	4.0	230	RL-3	2.0	150		j
eryllium	1.0	RL-3,U	1.0	1.0	RL-3,U	1.0	1.0	RL-3,U	1.0	0.50	U	0.50	1.0	RL-3.U	1.0	2.0	RL-3,U	2.0	1.0	RL-3	1.0	0.50	U	1
admium	1.0	RL-3,U	1.0	1.0	RL-3,U	1.0	1.0	RL-3,U	1.0	0.50	U	0.50	1.0	RL-3.U	1.0	2.0	RL-3,U	2.0	1.0	RL-3.U	1.0	0.50	υ	1
alcium	4,700	RL-3	30		RL-3	30	4,900	RL-3	30			15	1		30		RL-3	60	11,000	RL-3	30	2,500		1
hromium	23	RL-3	2.0		RL-3	2.0		RL-3	2.0	13	<u> </u>	1.0	41		2.0	32		4.0	38	RL-3	2.0	26		1
obalt	7.8	RL-3	2.0			2.0		RL-3	2.0	4.2		1.0	12		2.0	8.9		4.0	12	RL-3	2.0	11		†
		RL-3	10	23,000		10			10	12,000		5.0												+
on	22,000		+					RL-3	_			_	34,000		10	26,000	_	20	34,000	RL-3	10	22,000		+
ead	5.5	RL-3	4.0	5.9		4.0		RL-3	4.0	3.2		2.0	9.9		4.0	8.0		8.0	10	RL-3	4.0	6.3		4
agnesium	5,300	RL-3	20	6,200		20		RL-3	20	3,600	<u> </u>	10	7,900		20	5,800	RL-3	40	12,000	RL-3	20	6,100		4
anganese	480	RL-3	2.0		RL-3	2.0		RL-3	2.0	220		1.0	640	RL-3	2.0	490	RL-3	4.0	620	RL-3	2.0	450		4
егсигу	0.090		0.020	0.22		0.020	0.020	U	0.020	0.026		0.020	0.024		0.020	0.10		0.020	0.071		0.020	0.041		1
ckel	17	RL-3	2.0	21	RL-3	2.0	16	RL-3	2.0	8.1		1.0	29	RL-3	2.0	20	RL-3	4.0	28	RL-3	2.0	19		
lenium	4.0	RL-3,U	4.0	4.0	RL-3,U	4.0	4.0	RL-3,U	4.0	2.0	υ	2.0	4.0	RL-3,U	4.0	8.0	RL-3.U	8.0	4.0	RL-3,U	4.0	2.0	U	J
dium	860	RL-3	20	710	RL-3	20	350		10	460		10	840		10	690		10	1,200		10	740		1
allium	20	RL-3,U	20	_	RL-3,U	20		RL-3,U	20	10	υ	10		RL-3,U	20		RL-3,U	40	20	RL-3,U	20	10	U	1
nadium	50	RL-3	2.0			2.0		RL-3	2.0	31	-=	1.0	81		2.0		RL-3	4.0	85	RL-3	2.0	50		†
nc	50	RL-3	10			10	· · · · · · · · · · · · · · · · · · ·	RL-3	10	80		5.0	72		10		RL-3	20	130	RL-3	10	54		+
ies: A-01 = Sample used for MS/N														KL-3		33	KL-3	20	130	NL-3	101			-
B1 = Sodium was detected in the C1 = Calibration Verification of C2 = Calibration Verification of M-HA = Due to high levels of	rec: C1 = C	alibration Verif alibration Verif	ication reco	overy was abov	e the meth w the meth	od contro od contr	ol limit for this a ol limit for this a	tration in the sar analyte, howeve analyte, howeve	r the ave r the ave	rage % differen rage % differen	ce for a	ili analyi ili analyi	es met method tes met method	critena. Se critena. Se	e Calibr									

Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

Page 1 of 3 Parcel 41 Parcel 42 Parcel 32 Parcel 41 Parcel 41 Parcel 41 Parcel 42 Sample Location Parcel 32 Parcel 32 Sample Number WDI-SB-IDP-1-5 WDI-SB-IDP-2-9 WDI-SB-IDPFD-2-9 WDI-SB-IDP-2-20 WDI-SB-IDP-3-5 WDI-SB-IDP-3-20 WDI-SB-IDP-4-4 WDI-SB-IDP-4-20 WDI-SB-IDP-5-6 Fill Waste Native Sample Type Waste Waste Native Waste Native Waste Sample Depth)/9/00 0/9/00 10/9/00 0/9/00 0/9/00 10/9/00 10/9/00 0/9/00 Sample Date 10/9/00 Del Mar Analytical Laboratory 1330283-01 1JJ0283-02 1JJ0283-03 JJ0283-04 1JJ0283-05 1JJ0283-06 IJJ0283-07 1JJ0283-08 1JJ0283-09 Lab Sample ID 10/17/00 10/17/00 10/17/00 10/17/00 10/17/00 10/17/00 10/17/00 10/17/00 Analysis Date 10/17/00 RDL RDL Result Result Qual RDL Result RDL Result Result RDI Result RDI Result Result Qual Qual RDL Qual RDL Result Qual mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg ing/kg mg/kg mg/kg 5.0 U 5.0 3,300 Total Recoverable Hydrocarbor 2,200 25 1,200 3,700 10/11/00 10/11/00 10/11/00 10/11/00 10/12/00 10/12/00 10/12/00 Analysis Date 10/12/00 10/12/00 RDL RDL Result Qual RDL RDL Result Qual Result RDL Result Qual Qual RDL Result RDL Result Result RDL Result Qual RDL Result ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg 2.0 U 1.8 2.0 U 2.0 2.0 U 2.0 1.1.1-Trichloroethane U U H 1.8 U 1,1,2,2-Tetrachloroethane 2.0 U 2.0 1.7 U 1.7 U 1.7 1.8 U 1.8 υ 2.0 U 2.0 U 2.0 U 2.0 1.8 U 2.0 υ 1.7 U U 1.8 U 2.0 U .1.2-Trichloroethane 1.7 1.8 2.0 U 2.0 U U 1.7 1.8 U ,1-Dichloroethane 2.0 U 1.7 U 17 1.7 U 1.7 1.8 U 1.8 U 2.0 2.0 U 2.0 1.8 U 1.8 2.0 U 2.0 1.8 U 5.0 4.3 4.2 4.5 5.0 U 5.0 ,1-Dichloroethene υ υ 4.3 υ 4.2 U 4.5 U 5.0 U 5.0 4.5 U 4.5 U 1,2-Dibromoethane (EDB) 2.0 υ 1.7 U 1.7 1.7 U 17 1.8 U 1.8 2.0 U 2.0 2.0 U 2.0 1.8 U 1.8 2.0 U 2.0 1.8 υ 1.8 2.0 1.7 ,2-Dichloroethane υ υ 1.7 υ 1.8 υ 1.8 U 2.0 U 2.0 U 2.0 U U 1.8 1.8 2.0 U 1.7 1,2-Dichloropropane 2.0 1.7 υ 1.7 1.7 U 1.8 U 1.8 U 2.0 2.0 U 2.0 1.8 U 1.8 2.0 U 2.0 1.8 U 1.8 10 U 8.7 U 8.3 U 8.3 U 8.9 U 10 U U 10 U 9.0 υ 2-Butanone (MEK) 8.9 10 U 9.0 8.7 10 U U 8.3 8.9 U 8.9 89 - 11 8.9 2-Hexanone 10 U 87 υ 83 U 9.0 U 4-Methyl-2-pentanone (MIBK) 5.0 U 4.3 U 4.3 4.2 U 4.5 U 4.5 U 5.0 U 4.5 U 4.5 5.0 U 4.5 υ 4.5 8.7 10 U 10 U 10 U υ 8.7 8.6 8.3 8.9 U 10 υ 9.0 8.9 Acetone Benzene 2.0 U 1.7 υ 1.7 1.7 U 1.8 U 1.8 2.0 11 2 (2.0 U 2.0 1.8 U 1.8 2.0 U 1.8 U 1.8 2.0 1.7 Bromodichloromethane U U 1.7 U 1.8 υ 1.8 2.0 U 2.0 U | 2.0 1.8 U 2.0 U 1.8 5.0 4.3 5.0 U 5.0 5.0 U 5.0 U 43 υ 4.5 4.5 11 U 5.0 4.2 υ 4 2 4.5 5.0 11 5.0 4.5 11 4.5 4.5 Bromoform Bromomethane 5.0 U 4.3 U 43 4.2 U 4.5 υ 4.5 5.0 υ 5.0 U 4.5 U 4.5 5.0 U 5.0 4.5 U 4.3 4.5 5.0 U 5.0 5.0 U 4.5 4.5 5.0 U 5.0 4.5 Carbon Disulfide U U 4.3 4.2 υ U U 4.5 U υ 5.0 U 5.0 5.0 U 5.0 Carbon tetrachloride 5.0 U 43 U 4.3 4.2 U 4 7 4.5 4.5 5.0 U 5.0 4.5 U 4.5 4.5 υ 4.5 2.0 2.0 U 2.0 2.0 U 2.0 Chlorobenzene U 1.7 U 1.7 U 1.8 U 1.8 2.0 U U 1.8 U 4.3 43 4.5 U 4.5 4.5 4.5 Chloroethane 13 4.2 - 11 5.0 U 5.0 U 4.5 U 4.5 5.0 U 5.0 U Chloroform 2.0 U 1.7 U 1.8 U 2.0 υ 2.0 U 2.0 1.8 2.0 U 2.0 1.8 U 5.0 U 4.3 4.2 U 4.5 U 4.5 5.0 5.0 U 5.0 U 5.0 U 5.0 4.5 U U 4.3 4.2 4.5 4.5 Chloromethane 5.0 U 5.0 4.5 cis-1,2-Dichloroethene 2.0 U 1.7 U 1.7 U 1.7 1.8 U 1.8 2.0 U 2.0 U 2.0 1.8 U 2.0 U 2.0 1.8 U cis-1,3-Dichloropropene 2.0 1.7 1.8 U 2.0 2.0 U 2.0 2.0 U 2.0 1.8 U U U 1.8 U U 2.0 1.7 1.8 U 1.8 2.0 2.0 U 2.0 Dibromochloromethane U 1.7 U υ 1.7 U 1.8 U 1.8 2.0 U ____ 2.0 1.8 U 1.8 Ethylbenzene 2.0 U U 1.8 U 1. 2.0 U 2.0 U 2.0 1.8 U 2.0 U 2.0 1.8 υ 2.0 17 U 1.8 U 2.0 11 1.8 2.0 U m.p-Xylenes 11 U 1.1 1.7 U 2.0 U 2.0 1.8 1.8 11 Methylene chloride 20 U 17 U 18 U 20 20 U U 20 U υ 2.0 U 1.7 U U 1.8 U 1.8 2.0 2.0 U 2.0 υ 2.0 U 2.0 1.8 1.7 1.7 U 1.8 U o-Xylene 2.0 U 1.7 υ U 1.8 U 1.8 2.0 U 2.0 U 2.0 1.8 U 1.8 2.0 U 2.0 1.8 U Styrene 1.8 U 1.8 Tetrachloroethene U 2.0 U 2.0 2.0 U 2.0 1.8 2.0 U 2.0 U 2.7 U 1.8 2.0 U 1.7 1.8 U 1.8 2.0 U 2.0 Toluenc 2.0 υ U 1.7 U 2.0 U 1.8 U 1.8 υ trans-1,2-Dichloroethene 2.0 1.7 U U 1.8 U 2.0 υ 2.0 U 2.0 1.8 U 2.0 U 2.0 1.8 U 1.8 U 1.7 trans-1,3-Dichloropropene 2.0 U U 1.7 1.7 U 1.8 2.0 U 2.0 U 2.0 1.8 U 1.8 2.0 U 2.0 1.8 U 1.8 2.0 5.0 Trichloroethene υ U _υ_ υ 22 1.8 υ 1.8 2.0 U 2.0 υ 1.7 1.8 2.0 U 2.0 1.8 4.3 U U 4.5 U 4.5 4.5 5.0 U 5.0 U υ Vinyl acetate 5.0 4.3 4.2 4.2 5.0 5.0 U 5.0 4.5 4.5 U 4.5 Vinyl chloride 5.0 U 5.0 4.3 U υ 4.2 4.5 U 4.5 5.0 5.0 U 5.0 4.5 U 5.0 U 5.0 4.5

Notes: M = The MS and/or MSD were outside of the acceptance limits due to sample matrix interference. See Blank Spike (LCS)

U = Constituent not detected above laboratory's reporting limits

Subsurface Supplemental Investigation Table 4.2D

Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

Page 2 of 3

					,									,			,,			,			,		Pag	ge 2 of 3
	Parcel 32	<u> </u>	1_1	Parcel 12	L		Parcel 12			Parcel 21	L	↓ —↓	Parcel 21	L	_	Parcel 21	<u> </u>	Parcel 44			Parcel 44	L <u></u> .	ļ	Parcel 24		\perp
Sample Number	WDI-SB-ID	P-5-15	LI	WDI-SB-ID	P-6-5		WDI-SB-ID	P-6-15		WDI-SB-ID	P-7-5		WDI-SB-ID	OPFD-7-	5	WDI-SB-ID	P-7-15	WDI-SB-	IDP-8-5		WDI-SB-II	OP-8-9		WDI-SB-ID	P-10-6	↓
Sample Type	Native			Fill			Native			Waste		L	Waste		<u> </u>	Native		Waste			Waste		ļ	Fill		
Sample Depth	15		L	5			15		L				5			15	ļ	_	8		9			6		\perp
Sample Date	10/9/00	L		10/10/00	L		10/10/00			10/12/00	<u> </u>	⊥	10/12/00		<u> </u>	10/12/00	LL	10/12/00			10/12/00	1		10/13/00		
Laboratory	Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical		Del Mar An	alytical	$oxed{oxed}$	Del Mar Ar	alytical		Del Mar An	alytical	Del Mar A	Analytical		Del Mar Ar	nalytical		Del Mar Ana	lytical	
Lab Sample ID	1JJ0283-10			1JJ0315-01		l	1JJ0315-02			1JJ0445-01			1JJ0445-02			1JJ0445-03		1JJ0445-0	4		1330445-05		<u> </u>	IJJ0523-03		
Analysis Date	10/17/00			10/17/00			10/17/00			10/23/00			10/23/00			10/23/00		10/23/0	0		10/23/00			10/23/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual RDL	. Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		mg/kg			mg/kg			mg/kg		
Total Recoverable Hydrocarbons	14		5.0	240		5.0	5.6	υ	5.6	360		5.0	230		5.0	5.0	U 5.	0 9	1	5.0	110		5.0	33		5.0
Analysis Date	10/12/00			10/12/00			10/12/00			10/18/00			10/18/00		l	10/18/00		10/18/0	0	1	10/18/00			10/17/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL.
	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		ug/kg			ug/kg			ug/kg		
1,1,1-Trichloroethane	2.0	υ	2.0	2.0	υ	2.0	2.0	υ	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	U	1.8
1,1,2,2-Tetrachloroethane	2.0	υ	2.0	2.0	υ	2.0	2.0	υ	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	U	1.8
1,1,2-Trichloroethane	2.0	U	2.0	2.0	υ	2.0	2.0	U	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	υ	1.8
1,1-Dichloroethane	2.0	υ	2.0	2.0	υ	2.0	2.0	U	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	U	1.8
1,1-Dichloroethene	5.0	υ	5.0	5.0	U	5.0	5.0	υ	5.0	5.0	U	5.0	4.5	U	4.5	5.0	U 5.	0 4.	4 U	4.4	5.0	U	5.0	4.4	U	4.4
1,2-Dibromoethane (EDB)	2.0	υ	2.0	2.0	U	2.0	2.0	υ	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	U	1.8
1,2-Dichloroethane	2.0	U	2.0	2.0	υ	2.0	2.0	υ	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	Ū.	2.0	1.8	M,U	1.8
1,2-Dichloropropane	2.0	U	2.0	2.0	υ	2.0	2.0	υ	2.0	2.0	υ	2.0	1.8	υ	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	υ	1.8
2-Butanone (MEK)	10	υ	10	10	υ	10	10	Ü	10	10	U	10	8.9	υ	8.9	10	UI	0 8.	8 U	8.8	10	U	10	8.8	U	8.8
2-Hexanone	10	υ	10	10	U	10	10	υ	10	10	υ	10	8.9	υ	8.9	10	UI	0 8.	8 U	8.8	10	U	10	8.8	υ	8.8
4-Methyl-2-pentanone (MIBK)	5.0	υ	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	4.5	υ	4.5	5.0	U 5.	0 4.	4 U	4.4	5.0	υ	5.0	4.4	U	4.4
Acetone	10	U	10	10	U	10	10	U	10	10	U	10	8.9	U	8.9	10	U	0 8.	8 U	8.8	10	U	10	11		8.8
Benzene	2.0	U	2.0	2.0	υ	2.0	2.0	U	2.0	2.0	Ü	2.0	1.8	U	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	U	1.8
Bromodichloromethane	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0	2.0	U	2.0	1.8	υ	1.8	2.0	U 2.	0 1.	8 U	1.8	2.0	U	2.0	1.8	U	1.8
Bromoform	5.0	υ	5.0	5.0	U	5.0	5.0	υ	5.0	5.0	U	5.0	4.5	υ	4.5	5.0	U 5.	0 4.	4 U	4.4	5.0	U	5.0	4.4	U	4.4
Bromomethane	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	4.5	υ	4.5	5.0	U 5.	0 4.	4 U	4.4	5.0	U	5.0	4.4	U	4.4
Carbon Disulfide	5.0	υ	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	4.5	U	4.5	5.0	-	0 4.	4 U	4.4	5.0		5.0	4.4	Ų	4.4
Carbon tetrachloride	5.0	U	5.0	5.0	υ	5.0	5.0	U	5.0	5.0	U	5.0	4.5	U_	4.5	5.0				4.4	5.0		5.0	4.4	U	4.4
Chlorobenzene	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0	2.0	U	2.0	1.8	U	1.8	2.0		+		1.8	2.0		2.0	1.8	U	1.8
Chloroethane	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	υ	5.0	4.5		4.5	5.0			+	4.4	5.0		5.0	4.4	U	4.4
Chloroform	2.0	υ	2.0	2.0	U	2.0	2.0	υ	2.0	2.0	U	2.0	1.8		1.8	2.0				1.8	2.0		2.0	1.8	U	1.8
Chloromethane	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	4.5		4.5	5.0		+	+	4.4	5.0		5.0	4.4	U	4.4
cis-1,2-Dichloroethene	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	1.8		1.8	2.0				1.8	2.0	U	2.0	1.8	U	1.8
cis-1,3-Dichloropropene	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0	1.8		1.8	2.0	U 2.0			1.8	2.0	U	2.0	1.8	U	1.8
Dibromochloromethane	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	<u> </u>	2.0	1.8	_	1.8	2.0	U 2.0			1.8	2.0	υ	2.0	1.8	U	1.8
Ethylbenzene	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	<u> </u>	2.0	1.8		1.8	2.0	U 2.0			1.8	2.0		2.0	1.8	U	1.8
m,p-Xylenes	2.0		2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	1.8		1.8	2.0	U 2.0			1.8	2.0		2.0	1.8	U	1.8
Methylene chloride	20	U	20	20	<u> </u>	20	20	U	20	20	U	20	18	U	18	20	U 20	+	+	18	20	U	20	18	U	18
o-Xylene	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	<u> </u>	2.0	1.8	U	1.8	2.0	U 2.0			8.1	2.0		2.0	1.8	<u> </u>	1.8
Styrene	2.0		2.0	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0	1.8	υ	1.8	2.0	U 2.0	+		1.8	2.0		2.0	1.8	U	1.8
Tetrachloroethene	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.0			1.8	2.0		2.0	1.8	U	1.8
Toluene	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.0	·		1.8	2.0		2.0	1.8	U	1.8
trans-1,2-Dichloroethene	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	1.8	U	1.8	2.0	U 2.0	+	+	1.8	2.0		2.0	1.8	U	1.8
trans-1,3-Dichloropropene	2.0	U	2.0	2.0	<u> </u>	2.0	2.0	U	2.0	2.0	U	2.0	1.8	U	1.8	2.0			·	1.8	2.0		2.0	1.8	U	1.8
Trichloroethene	2.0	U	2.0	2.0	<u> U </u>	2.0	2.0	U	2.0	2.0	<u> </u>	2.0	1.8	U	1.8	2.0	U 2.0			1.8	2.0		2.0	1.8	U	1.8
Vinyl acetate	5.0	U	5.0	5.0	<u> </u>	5.0	5.0	U	5.0	5.0	<u> </u>	5.0	4.5	U	4.5	5.0	U 5.0	4.	+	4.4	5.0		5.0	4.4	U	4.4
Vinyl chloride	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	4.5	U	4.5	5.0	U 5.0) 4.	4 U	4.4	5.0	U	5.0	4.4	U	4.4

Notes: M = The MS and/or MSD were outsid/Notes: M = The MS and/or MSD were outside of the acceptance limits due to sample matrix interference. See Blank Spike (ECS).

U = Constituent not detected above U = Constituent not detected above laboratory's reporting limits.

Subsurface Supplemental Investigation Table 4.2D

Total Recoverable Petroleum Hydrocarbons and Volatile Organic Compounds Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

Page 3 of 3

		,				,												,		,					 -				Pag	ge 3 of 3
Sample Location	Parcel 24			Parcel 24			Parcel 22	<u> </u>	.↓	Parcel 22		L	Parcel 22		<u> </u>	Parcel 22]		Parcel 24	<u> </u>	ļ	Parcel 24			Parcel 24		L	Parcel 24		
Sample Number	WDI-SB-II	OP-10-11		WDI-SB-I	DP-10-20	<u> </u>	WDI-SB-ID	P-12-5	<u> </u>	WDI-SB-ID	P-12-15	<u> </u>	WDI-SB-ID	P-13-10	_	WDI-SB-II	P-13-20		WDI-SB-ID	P-14-5	1	WDI-SB-II	OP-14-10	ļ	WDI-SB-ID	PFD-14-10	ļI	WDI-SB-IDP	-14-20	<u> </u>
Sample Type	Waste	<u> </u>		Native		<u> </u>	Native	ļ		Native			Waste		<u> </u>	Native			Waste		_	Waste	<u></u>	<u> </u>	Waste			Native		<u>i </u>
Sample Depth	11			2	0	L	5			15			13		↓	20	 	ļl	14			10		l	10			20		
Sample Date	10/13/00			10/13/00			10/13/00			10/13/00			10/13/00		L	10/13/00	L		10/14/00			10/14/00		<u> </u>	10/14/00			10/14/00		L
Laboratory	Del Mar Ai	nalytical		Del Mar A	nalytical		Del Mar An	alytical		Del Mar An	alytical		Dei Mar Ana	lytical		Del Mar Ar	nalytical		Del Mar An	alytical		Del Mar Ar	nalytical		Del Mar An	alytical		Del Mar Anal	lytical	
Lab Sample 1D	1JJ0523-04			1330523-05	5	1	1JJ0523-06		1	1JJ0523-07			1JJ0523-08		<u> </u>	1JJ0523-09		1	1JJ0531-01			1JJ0531-02	L		1JJ0531-03		1 1	IJJ0531-04		1
Analysis Date	10/23/00			10/23/0	0		10/23/00			10/23/00			10/25/00		Ϊ	10/25/00	I		10/25/00			10/25/00			10/25/00			10/25/00		i —
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result (Qual	RDL
	mg/kg			mg/kg		1	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		i
Total Recoverable Hydrocarbons	1,300		20	5.0	0 U	5.0	5.0	υ	5.0	5.0	υ	5.0	2,100		50	11		5.0	1,300		25	1,600		50	510		50	500		50
Analysis Date	10/17/00			10/17/0	0		10/17/00		1	10/17/00			10/17/00			10/17/00			10/17/00			10/21/00			10/17/00			10/21/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result C	Qual	RDL
	ug/kg		1	ug/kg	1	1	ug/kg	T	1	ug/kg			ug/kg			ug/kg			ug/kg		1	ug/kg	,	1	ug/kg			ug/kg	`	
1,1,1-Trichloroethane	1.6	U	1.6	1.	7 U	1.7	1,6	U	1.6	2.0	υ	2.0	2.0	Ü	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0
1,1,2,2-Tetrachloroethane	1.6		1.6	1.1	7 U	1.7	1.6	Ū	1.6	2.0	υ	2.0	2.0	υ	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
1,1,2-Trichloroethane	1.6	+	1.6	1.1		1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
1,1-Dichloroethane	1,6		1.6	1.		1.7	1.6		1.6	2.0	U	2.0	2.0	Ū	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	Ü	2.0
1,1-Dichloroethene	4.0		4.0	4.3		4.2	4.1		4.1	5.0	υ	5.0	5.0	U	5.0	4.1	Ū	4.1	4.5	Ü	4.5	5.0	Ū	5.0	5.0	U	5.0	5.0	U	5.0
1,2-Dibromoethane (EDB)	1,6		1.6	1.1	 	1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1.6	υ	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	Ü	2.0
1,2-Dichloroethane	1.6	+	1.6	1.1	7 U	1.7	1.6	U	1.6	2.0	υ	2.0	2.0	U	2.0	1.6	υ	1.6	8.1	U	1.8	2.0	υ	2.0	2.0	U	2.0	2.0	Ü	2.0
1,2-Dichloropropane	1.6	 	1.6	1.	7 U	1.7	1.6	U	1.6	2.0		2.0	2.0	Ü	2.0	1.6	υ	1.6	1.8	Ü	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
2-Butanone (MEK)	8.0		8.0	8.	3 U	8.3	8.2	U	8.2	10	U	10	10	U	10	8.1	U	8.1	8.9	U	8.9	10	U	10	10	Ü	10	10	υ	10
2-Hexanone	8.0	U	8.0	8.3	3 U	8.3	8.2	υ	8.2	10	υ	10	10	U	10	8.3	U	8.1	8.9	U	8.9	10	U	10	10	U	10	10	Ü	10
4-Methyl-2-pentanone (MIBK)	4.0	U	4.0	4.2	2 U	4.2	4.1	U	4.1	5.0	υ	5.0	5.0	U	5.0	4.1	U	4.1	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.0	υ	5.0
Acetone	8.0	U	8.0	8.3	3 U	8.3	8.2	U	8.2	10	υ	10	33		10	8.1	U	8.1	8.9	Ü	8.9	10	U	10	10	υ	10	10	υ	10
Benzene	1.6	U	1.6	1.1	7 U	1.7	1.6	υ	1.6	2.0	U	2.0	4.2		2.0	1.6	U	1.6	14		1.8	99		2.0	140		2.0	2.0	U	2.0
Bromodichloromethane	1.6	υ	1.6	1.7	7 U	1.7	1.6	υ	1.6	2.0	U	2.0	2.0	U	2.0	1.6	υ	1.6	1.8	Ü	1.8	2.0	U	2.0	2.0	υ	2.0	2.0	U	2.0
Bromoform	4.0	υ	4.0	4.2	2 U	4.2	4.1	υ	4.1	5.0	U	5.0	5.0	U	5.0	4.1	U	4.1	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Bromomethane	4.0	U	4.0	4.2	2 U	4.2	4.1	U	4.1	5.0	υ	5.0	5.0	U	5.0	4.1	U	4.1	4.5	υ	4.5	5.0	U	5.0	5.0	U	5.0	5.0	υ	5.0
Carbon Disulfide	4.0	U	4.0	4.2	2 U	4.2	4.1	υ	4.1	5.0	_ บ	5.0	5.0	U	5.0	4.1	υ	4.1	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Carbon tetrachloride	4.0	U	4.0	4.2	2 U	4.2	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.1	U	4.1	4.5	υ	4.5	5.0	υ	5.0	5.0	υ	5.0	5.0	U	5.0
Chlorobenzene	1.6	υ	1.6	1.7	7 U	1.7	1.6	U	1.6	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	8.9		2.0	2.0	U	2.0
Chloroethane	4.0	υ	4.0	4.2	2 U	4.2	4.1	U.	4.1	5.0	U	5.0	5.0	U	5.0	4.1	U	4.1	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Chloroform	1.6	U	1.6	1.7	7 U	1.7	1.6	υ	1.6	2.0	U	2.0	2.0	U	2.0	1,6	U	1.6	1.8	υ	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
Chloromethane	4.0	U	4.0	4.2	2 U	4.2	4.1	υ	4.1	5.0	U	5.0	5.0	U	5.0	4.1	υ	4.1	4.5	υ	4.5	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
cis-1,2-Dichloroethene	1.6	U	1.6	1.7	7 U	1.7	1.6		1.6	2.0	υ	2.0	2.0	U	2.0	1.6	U	1.6	1.8	υ	1.8	2.0	Ü	2.0	2.0	U	2.0	2.0	U	2.0
cis-1,3-Dichloropropene	1.6	U	1.6	1.7	+	1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	1.8	υ	1.8	2.0	υ	2.0	2.0	U	2.0	2.0	U	2.0
Dibromochloromethane	1,6	ļ	1.6	1.7	+	1.7	1.6		1.6	2.0	υ	2.0	2.0	U	2.0	1.6		1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
Ethylbenzene	1.6	 	1.6	1.7	7 U	1.7	1.6		1.6	2.0	U	2.0	49	_	2.0	1.6		1.6	1.8	U	1.8	2.0	U	2.0	2.3		2.0	2.0	υ	2.0
n.p-Xylenes	1.6		1.6	1.7	+	1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1,6	U	1.6	1.8	υ	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
Methylene chloride	16		16	17	+	17	16		16	20	U	20	20	U	20	16	U	16	18	U	18	20	U	20	20	υ	20	20	U	20
o-Xylene	1.6		1.6	1.7	+ -	1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1.6	υ	1.6	1.8	υ	1.8	2.2		2.0	2.9		2.0	2.0	U	2.0
Styrene	1.6	U	1.6	1.7	+	1.7	1.6	U	1.6	2.0	U_	2.0	2.0	U	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
Tetrachloroethene	1.6	·	1.6	1.7	7 U	1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0
Toluene	1.6		1.6	1.7		1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	1.8	υ	1.8	2.0	υ	2.0	2.0	U	2.0	2.0	U	2.0
rans-1,2-Dichloroethene	1.6	U	1.6	1.7	7 U	1.7	1.6	U	1.6	2.0	U	2.0	2.0	U	2.0	1.6	υ	1.6	1.8	υ	1.8	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0
rans-1,3-Dichloropropene	1.6		1.6	1.7	+	1.7	1.6		1.6	2.0	U	2.0	2.0	U	2.0	1.6	U	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	υ	2.0
Trichloroethene	1.6		1.6	1.7	7 U	1.7	1,6	U	1.6	2.0	υ	2.0	2.0	U	2.0	1.6	υ	1.6	1.8	U	1.8	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
Vinyl acetate	4.0		4.0	4.2	υ	4.2	4.1	U	4.1	5.0	U	5.0	5.0	U	5.0	4.1	U	4.1	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
		U	4.0		2 U	4.2		U	4.1																				υ	5.0

Notes. M = The MS and/or MSD were outsid/Notes: M = The MS and/or MSD were outside of the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

U = Constituent not detected above U = Constituent not detected above laboratory's reporting limits.

Subsurface Supplemental Investigation Table 4.2E

Semi-Volatile Organic Compounds Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

Page 1 of 3 Sample Location Parcel 41 Parcel 41 Parcel 41 Parcel 41 Parcel 42 Parcel 42 Parcel 32 Parcel 32 Parcel 32 WDI-SB-IDP-1-5 WDI-SB-IDP-2-9 WDI-SB-IDPFD-2-9 WDI-SB-IDP-2-20 WDI-SB-IDP-3-5 WDI-SB-IDP-3-20 WDI-SB-IDP-4-4 WDI-SB-IDP-4-20 WDI-SB-IDP-5-6 Sample Number Sample Type Waste Waste Waste Native Native Waste Native Waste Sample Depth 10/9/00 Sample Date 10/9/00 0/9/00 10/9/00 0/9/00 10/9/00 10/9/00 0/9/00 0/9/00 Del Mar Analytical Del Mar Analytical Ocl Mar Analytical Ocl Mar Analytical Del Mar Analytical Del Mar Analytical Del Mar Analytical Ocl Mar Analytical Del Mar Analytical Laboratory 1110283-05 1110283-06 1JJ0283-01 1JJ0283-02 IJJ0283-03 1JJ0283-04 1330283-07 1110283-08 1330283-09 Lab Sample ID 10/19/00 Analysis Date 10/19/00 10/19/00 10/19/00 10/19/00 10/19/00 10/19/00 10/24/00 10/20/00 RDL Result Result Result Qual RDL Result Qual RDL Result RDL Result Qual Qual RDL RDL Result RDL Result Qual RDL Result Qual ıg/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg 100 U 100 ,2,4-Trichlorobenzene 500 100 U 2,000 RL-2.U 2.000 __2,500 RL-2,U 100 U 100 4,000 RL-2,U 4 000 500 RL-2.U 1.000 RL-2,U 1,000 1,000 RL-2,U | 1,000 500 RL-2,U 500 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 100 U 100 2,500 RL-2,U 2,500 100 U 100 4.000 RL-2,U 4.000 1.2-Dichlorobenzene 1,000 RL-2,U 1,000 100 U 3-Dichlorobenzene 500 RL-2,U 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 2000 R1-211 2 000 100 U 100 2,500 RL-2.U 2,50 100 U 100 4,000 RL-2,U 4,000 100 U 100 4-Dichlorobenzene RL-2.U 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 2,000 RL-2,U 2.000 2,500 RL-2,U 2,500 100 U 4,000 RL-2,U 4.000 150 U 150 2,4,5-Trichlorophenol 750 RL-2,U 750 1,500 RL-2,U 1,500 1.500 RL-2,U 1,500 150 U 3,000 RL-2,U 3.000 3.800 RL-2,U 3.800 150 U 150 6,000 RL-2,U 6,000 150 U 150 6,000 RL-2,U 6,000 2,4,6-Trichlorophenol RL-2,U 750 1,500 RL-2,U 1,500 1.500 RL-2.U 1.500 150 U 150 3,000 RL-2,U 3,000 3.800 RL-2.U 3.800 2.000 RL-2,U 4,000 RL-2,U 4.000 1.000 RL-2.U 1.000 2.000 100 U 1 100 2 500 RI-2 H 2 500 ,4-Dichlorophenol _500 RL-2,U 500 1,000 RL-2,U 1,000 1**00** U 100 100 11 100 2,500 2,500 RL-2,U 2,500 5,000 RL-2,U 250 U 250 6.300 RL-2,U 250 U 10.000 10,000 4-Dinitrophenol 1,300 RL-2,U 2,500 RL-2,U 250 U 5,000 6,300 RL-2,U 100 U 100 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 2.000 RL-2.U 2.000 100 U 100L 2,500 RL-2,U 2,500 4.000 RL-2.U 4.000 500 2.4-Dinitrotolucne RL-2.U 6-Dinitrotoluene 500 RL-2,U 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 2,000 RL-2,U 2,000 100 U 100 2,500 RL-2,U 2,500 100 U 100 4,000 RL-2,U 4.000 500 1.000 RL-2.U 1.000 2.000 RL-2.U 100 U 1 100 2.500 RL-2.U 2.500 100 U 100 4.000 RL-2.U 4,000 -Chloronaphthalene RL-2.U 500 1.000 RL-2.U 1.000 100 U | 100 2.000 -Methylnaphthalene 500 RL-2,U 500 1,000 RL-2,U 1,000 1.000 RL-2,U 1,000 100 U 100 2,000 RL-2,U 2.000 100 U 100 2,500 RL-2,U 2,500 100 U 1 100 4.000 RL-2,U 4,000 2-Methylphenol 1,500 RL-2,U 1,500 750 RL-2,U 750 1,500 RL-2,U [1,500] 150 U 150 3,000 RL-2,U 3,000 150 U 150 3,800 RL-2,U 3,800 150 U 150 6,000 RL-2.U 6,000 5.000 RL-2,U 5.000 8,000 RL-2,U 2-Nitroaniline 1.000 RL-2,U 1,000 2,000 RL-2,U 2,000 2,000 RL-2.U 2.000 200 U 200 4.000 RL-2.U 4,000 200 U 200 200 U 200 8 000 2-Nitrophenol RL-2,U 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 2,000 RL-2,U 2.00 100 2,500 RL-2,U 2.500 4.000 RL-2.U 4.000 10,000 RL-2,U 10,000 13,000 RL-2,U 13.000 2 500 5,000 RL-2,U 5,000 5.000 RL-2,U 5,000 500 U 500 500 11 500 500 U 500 20,000 RL-2,U 20.000 3.3-Dichlorobenziding RL-2,U 2,500 4,6-Dinitro-2-methylphenol 1,300 RL-2.U 1,300 2,500 RL-2,U 2,500 RL-2,U 2,500 250 U 250 5,000 RL-2,U 5,000 250 U 250 6,300 RL-2,U 6,300 250 U 250 10,000 RL-2,U 10,000 3.800 RL-2,U 3.000 3.800 6.000 RL-2.U 6.000 4-Bromophenyl phenyl ether R1.-2.U 750 1,500 RL-2,U 1,500 1.500 RL-2,U 1,500 U 150 3,000 RL-2,U 150 U | 150 150 U | 150 750 150 4-Chloro-3-methylphenol 500 500 1,000 RL-2,U 1,000 1,000 RL-2.U 1,000 100 U 100 2,000 RL-2,U 2,000 100 U 1 100 2,500 RL-2,U 2,500 100 U 100 4.000 RL-2.U 4.000 RL-2,U 4-Chloroaniline 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 2.000 RL-2,U 2,000 100 U 100 2,500 RL-2,U 2,500 100 U 100 4.000 RL-2,U 4.000 500 RL-2,U 100 U 100 100 U 100 4.000 RL-2,U 4,000 4-Chlorophenyl phenyl ether 500 RL-2,U 500 1,000 RL-2,U 1,000 1,000 RL-2,U [1,000 100 U 100 2,000 RL-2,U | 2,000 2,500 RL-2,U 2,500 4-Methylphenol RL-2,U 1,500 RL-2,U 1,500 1,500 RL-2,U 1,500 U 3.000 RL-2,U 3.000 3.800 RL-2,U 3.800 150 U 150 6.000 RL-2,U 6.000 5,000 RL-2.U 5.000 RL-2.U 10,000 500 U 500 4-Nitroaniline RL-2.U 2.500 13,000 RL-2,U 13,000 500 U 500 20,000 RL-2,U 20,000 2.500 5,000 RL-2.U 5.000 500 U 500 10,000 500 500 1,000 RL-2,U 1,000 RL-2,U 1,000 100 U 100 100 U 100 2,500 RL-2,U 2,500 100 U 100 Acenaphthene RL-2,U 2,000 RL-2,U 2,000 4,000 RL-2,U 4,000 1,000 RL-2,U 1,000 4,000 RL-2,U 4,000 Acenaphthylene 500 R1 -2 11 500 1.000 RL-2,U 1,000 100 106 2.000 R1.-2.U 2.000 100 U 100 2,500 RL-2.U 2.500 100 U L 100 U Anthracene 500 RL-2,U 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 10 2,000 RL-2,U 2,000 100 U 100 2,500 RL-2,U 2.500 100 U 100 4,000 RL-2,U 4,000 Benzo(a)anthracene RL-2.U 500 1,000 RL-2,U 1,000 1.000 RL-2,U 1,000 U 100 2,000 RL-2,U 2,000 100 U 100 2.500 RL-2,U 2,500 100 U 100 4,000 RL-2,U 4,000 200 U 200 Benzo(a)pyrene -1.0001RL-2.U 1.000 2,000 RL-2,U 2,000 2,000 RL-2,U 2,000 200 U | 200 4,000 RL-2,U 4.000 5.000 R1.-2.U 5.000 200 U 20 8,000 RL-2,U 8.000 4.000 5,000 8,000 RL-2,U Benzo(b)fluoranthene 1.000 RL-2.U 1.000 2,000 RL-2,U 2,000 2,000 RL-2,U 2,000 υ 4,000 RL-2.U 200 U 200 RL-2,U 5,000 200 U 200 8,000 750 1,500 RL-2,U 1,500 1.500 RL-2,U 1,500 U 150 3.000 RL-2.U 3.000 150 U 150 3.800 RL-2.U 3.800 150 11 150 6,000 RL-2,U RI -2 11 750 150 6.000 Benzo(g,h,i)perylene 1,000 RL-2,U 2,000 RL-2,U 2,000 2,000 RL-2,U 2,000 U 200 4.000 RL-2,U 4,000 200 U 200 5,000 RL-2,U 5.000 200 U 200 8,000 RL-2,U 8,000 Benzo(k)fluoranthene 1.000 Bis(2-chloroethyl)ether 500 RL-2.U 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 U 100 2,000 RL-2,U 2,000 100 U 100 2,500 RL-2,U 2,500 100 4,000 RL-2,U 4.000 1001 100 U Bis(2-chloroisopropyl)ether 500 RL-2,U 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 2,000 RL-2,U 2.000 100 U 100 2.500 RL-2,U 2,500 100 U 100 4,000 RL-2,U 4 000 500 U 500 500 U 500 Bis(2-ethylhexyl)phthalate 2,500 RL-2.U 5,000 RL-2,U 5,000 5,000 RL-2,U 5,000 10,000 RL-2,U 10,000 13,000 RL-2,U 13,000 500 U 500 20,000 RL-2,U 20,000 5,000 RL-2,U 5,000 500 U 500 500 U 500 13,000 RL-2,U 13,000 Butyl benzyl phthalate 2,500 RL-2,U 2.500 5.000 RL-2.U 5.000 10,000 RL-2,U 10,000 500 U 500t 20,000 RL-2,U 20,000 100 U 100 2.500 RL-2,U 4,000 RL-2,U 4,000 500 RL-2,U 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 υ 2,000 RL-2,U 2.000 2.500 100 U Chrysene 250 U 250 1,300 RL-2,U 2,500 RL-2,U 2,500 2,500 RL-2,U 2,500 250 U 250 6.300 RL-2.U 6.300 10.000 RL-2.U 10.000 5,000 RL-2,U 5,000 250 Di-n-butyl phthalate 1.300 250 U 5,000 RL-2,U 5,000 500 U 500 10,000 RL-2,U 10,000 500 U 500 13,000 RL-2.U 13,000 500 20,000 RL-2,U 20,000 Di-n-octyl phthalate 2,500 RL-2,U 5,000 RL-2,U 5,000 250 U 250 Dibenz(a.h)anthracene 1,300 RL-2.U 2,500 RL-2,U 2,500 2,500 RL-2,U 2,500 250 U 250 5.000 RL-2.U 5 000 6.300 R1-2 U 6.300 250 10,000 RL-2,U 10,000 1,300 250 U Dibenzofuran 500 RL-2,U 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 U 100 2,000 RL-2,U 2,000 100 U 10 2,500 RL-2,U 2,500 100 U 100 4,000 RL-2,U 4,000 Dimethyl phthalate 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 2,500 RL-2,U 2,500 4,000 RL-2,U 4,000 500 RL-2.U 500 2.000 RL-2.U 2.000 100 U 100 100 U 100 Fluoranthene 500 RL-2,U 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 2,000 RL-2,U 2,000 100 U 100 2.500 RL-2.U 2.500 100 U 100 4,000 RL-2,U 4,000 500 RL-2,U 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 υ 2,000 RL-2,U 2,000 100 U 100 2,500 RL-2,U 2,500 100 4,000 RL-2.U 4.000 Fluorene 100 100 U 1,000 RL-2,U 1.000 2,000 RL-2,U 2.000 200 U 200 8,000 RL-2,U 8,000 Indeno(1,2,3-cd)pyrene 2,000 RL-2,U 2,000 4,000 RL-2,U 4,000 200 U 200 5,000 RL-2,U 5,000 200 U 200 500 RL-2,U 500 1,000 RL-2,U 1,000 RL-2,U 1,000 100 U 100 2,000 RL-2,U 2,000 100 U 100 2,500 RL-2,U 2.500 100 U 100 4,000 RL-2,U 4,000 Isophorone 1,000 1,500 150 U 150 150 U 150 6,000 RL-2,U 6.000 n-Nitroso-di-n-propylamine 750 RL-2.U 750 RL-2,U 1,500 1,500 RL-2,U 1.500 3,000 RL-2,U 3,000 150 U 150 3,800 RL-2,U 3,800 -Nitrosodiphenylamine 8,000 RL-2,U 1.000 RL-2,U 1,000 2,000 RL-2,U 2,000 2,000 RL-2,U 2,000 200 U. L 20 4,000 RL-2,U 4,000 200 U 200 5,000 RL-2,U 5,000 200 U 200 8,000 150 U 150 750 RL-2,U 1,500 1,500 150 U 150 3,000 RL-2,U 3.000 3,800 RL-2,U 3.800 6,000 RL-2 II 6,000 Naphthalene 750 RL-2.U 1.500 RL-2,U 1,500 150 U 150 13,000 RL-2,U 13,000 5,000 RL-2,U 5,000 500 U 500 500 U Nitrobenzene 2.500 RL-2,U 2,500 5,000 RL-2,U 5,000 10,000 RL-2,U 10,000 500 500 U 500 20,000 RL-2,U 20,000 500 U 500 500 U 500 Pentachlorophenol 10,000 RL-2,U 10,000 500 13,000 RL-2,U 13,000 2,500 RL-2,U 2,500 5,000 RL-2,U 5,000 5,000 RL-2,U 5,000 500 U 20,000 RL-2,U 20,000 500 500 1,000 RL-2,U 1,000 1,000 RL-2,U 1,000 100 U 100 100 U 100 2,500 RL-2,U 2,500 100 U 100 4,000 RL-2,U 4,000 Phenanthrene RL-2.U 2,000 RL-2,U 2,000 750 RL-2,U 750 1,500 RL-2,U 1,500 3,000 RL-2,U 3,000 150 U 150 150 U 150 1,500 RL-2,U 1,500 3,800 RL-2,U 3,800 150 U 150 Phenol 6.000 RL-2.U | 6.000 750 RL-2,U 750 1,500 RL-2,U 1,500 1,500 RL-2,U 1,500 150 U 150 3,000 RL-2,U 3,000 150 U 150 3,800 RL-2,U 3,800 150 U 150 6,000 RL-2,U 6,000



Notes: M = The MS and/or MSD were outside of the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

R = The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.

R1-2 = Reporting limit raised due to high concentrations of hydrocarbons and by a clean-up procedure for Method 418.1 which reduces the total hydrocarbon concentration. This procedure results in the loss of semi-volatiles due to a loss of target analytes

U = Constituent not detected above laboratory's reporting limits.

Subsurface Supplemental Investigation Table 4.2E

Semi-Volatile Organic Compounds Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

Page 2 of 3 Sample Location Parcel 32 Parcel 12 Parcel 12 Parcel 21 Parcel 21 Parcel 21 Parcel 44 Parcel 44 Parcel 24 WDI-SR-IDP-5-15 WDI-SB-IDP-6-5 WDI-SR-IDP-6-15 WDI-SB-IDP-7-5 WDI-SR-IDPFD-7-WDI-SB-IDP-7-19 WDI-SR-IDP-8-5 WDI-SB-IDP-8-9 WDI-SR-IDP-10-6 Sample Number Waste Vaste Waste Sample Type Native Native Vative Waste Sample Depth 0/9/00 10/12/00 0/12/00 0/12/00 10/10/00 10/10/00 0/12/00 10/12/00 0/13/00 Sample Date Del Mar Analytical Laboratory Del Mar Analytical Del Mar Analytical Del Mar Analytical Del Mar Analytical 1330315-01 JJ0315-02 IJJ0445-01 JJ0445-02 İ 1JJ0445-03 JJ0445-04 1330445-05 JJ0523-03 ab Sample ID 13J0283-10 10/23/00 10/23/00 10/23/00 10/23/00 10/23/00 10/24/00 Analysis Date 10/20/00 10/19/00 10/19/00 Qual RDL Result RDL Result RDL Result Qual Result Qual RDL Result Qual RDL Result Qual RDL Result RDL Result Result Qual ıg⁄kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg 1,2,4-Trichlorobenzene 4,000 RL-2,U 4,00 100 M,R,U 500 RL-2,U 500 U 10 100 U 1,000 RL-2,U R1.-2.U RL-2,U 1.000 1.000 100 U 100 500 RL-2,U 500 100 U 100 100 U 100 1,000 RL-2,U 1,000 RL-2,U 500 1.2-Dichlorobenzene 100 100 4,000 RL-2.U 4,000 1,000 RL-2,U 1,000 U 500 3-Dichlorobenzene 100 100 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 100 U 10 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 1,000 RL-2.U υ 1.4-Dichlorobenzene 100 4.000 RL-2,U 4,000 100 U 100 500 RL-2,U 100 U 100 U 100 1.000 RL-2.U 1,000 RL-2,U 3.000 RL-2,U U 150 U 750 150 U 150 U | 150 1,500 RL-2,U___1,500 750 750 1,500 RL-2,U 1,500 2,4,5-Trichlorophenol 150 U 6,000 RL-2,U 6,000 150 RL-2,U 15 R1.-2.U 750 RL-2,U 150 U 150 1,500 RL-2,U 1,500 2,4,6-Trichlorophenol 150 6,000 RL-2,U 6,000 150 U 150 U 150 1,500 RL-2,U 1,500 750 RL-2,U 750 U 10 100 U 100 1,000 RL-2,U 1.000 500 500 1.000 2.4-Dichlorophenol 100 11 100 4.000 RL-2.U 4 000 100 U 100 500 RL-2.U 100 U RL-2,U 1,000 RL-2.U 250 U 250 1,300 250 2,500 RL-2,U 2,500 1,300 1,300 2,500 2,500 4-Dinitrophenol U 250 10.000 RL-2,U 10,000 RL-2,U 1,300 U 250 U 250 RL-2,U RL-2.U 100 U 100 100 U RL-2,U 500 2.4-Dinitrotoluene 100 1) 100 4,000 RL-2,U 4,000 100 500 RL-2.U 500 100 U 100 1,000 RL-2.U 1,000 500 3,000 RL-2,U 1,000 100 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 500 U 10 100 U 100 1,000 RL-2,U 1,000 RL-2,U 500 1,000 RL-2,U 1,000 2,6-Dinitrotoluene U 10 100 500 4,000 RL-2,U 4,000 100 U 100 500 RL-2.U 100 10 100 U 100 1.000 RL-2.U 1.000 500 RL-2.U 1,000 RL-2.U 1.000 Chloronaphthalene 100 U U Methylnaphthalenc 100 U 100 U 100 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 100 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 500 1,000 RL-2,U 1,000 Methylphenol RL-2,U 750 6,000 RL-2,U 6,000 150 U 150 750 RL-2,U 150 U 150 150 U 1,500 RL-2,U 1,500 1,500 RL-2.U 1,500 150 U Nitroaniline 200 11 200 8,000 RL-2,U 8.00 200 U 200 1,000 RL-2,U 1,000 200 υ 200 200 U 200 2.000 Rt.-2.U 2.000 1.0001 RL-2,U 1,000 2,000 RL-2,U 2.000 100 4,000 100 1,000 RL-2,U 1,000 500 500 1,000 Nitrophenol 4,000 RL-2,U U 500 RL-2,U RL-2,U RL-2,U 1,000 500 U 500 20,000 RL-2,U 20,000 500 U 500 2,500 RL-2,U 2,500 5,000 RL-2,U 5,000 2,500 RL-2,U 2,500 5,000 RL-2,U 5,000 3-Dichlorobenzidine 500 U 500 U 10,000 RL-2,U 10,000 ,6-Dinitro-2-methylphenol 250 250 U 1,300 RL-2,U 1,300 250 υ 250 250 U 2,500 RL-2,U 2,500 1,300 RL-2,U 1,300 2,500 RL-2,U 2,500 6,000 150 U 1,500 RL-2,U 1,500 RL-2.U 1,500 -Bromophenyl phenyl ether 6,000 RL-2,U RL-2.U 750 RL-2,U 1,500 150 U 750 150 150 U 4-Chloro-3-methylphenol 100 U 100 4,000 RL-2,U 4 000 100 M.R.U. 100 500 RL-2,U 100 11 10 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 500 1,000 RL-2,U 1,000 -Chloroaniline 100 U 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 100 U 1,000 RL-2,U 1,000 500 RL-2,U 1,000 RL-2,U 1,000 500 RL-2,U -Chlorophenyl phenyl ether 100 U 100 4.000 RL-2,U 4 000 100 U 100 500 R1-2.11 100 1.) 100 100 U 100 1,000 RL-2.U 1,000 1,000 RL-2,U 1,000 -Methylphenol 150 6,000 RL-2,U 6,000 150 υ 150 750 RL-2,U 150 U 150 U 1,500 RL-2,U 1,500 750 RL-2,U 1,500 RL-2.U 1.500 500 20,000 RL-2,U 20,000 500 U 2,500 500 U 500 500 5,000 RL-2,U 5,000 2,500 RL-2.U 2,500 5,000 RL-2,U 5,000 -Nitroaniline U 500 RL-2.U 2,500 500 U 100 U 100 4,000 RL-2,U 4,000 100 M,U 100 500 RL-2.U 100 U 100 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 500 1,000 RL-2.U 1.000 Acenaphthene 100 4,000 RL-2,U 4,000 υ 500 RL-2,U υ 100 100 U 1,000 RL-2,U 500 RL-2,U 1,000 RL-2,U Acenaphthylene 100 500 RL-2,U 500 Anthracene 100 U 100 4.000 RL-2.U 4.000 100 11 100 500 RL-2,U 100 - 11 | 100 100 E 100 J,000 RL-2,U 1,000 1.000 RL-2.U 1.000 1,000 RL-2,U 1,000 Benzo(a)anthracene 100 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 100 U I 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 500 8.000 RL-2.U 200 U 200 200 2.000 RL-2.U 2.000 1.000 RL-2.U 2.000 RL-2.U 2.000 Benzo(a)pyrene 200 U 200 8.000 200 1.000 RL-2.U U 200 U 200 1,000 Benzo(b)fluoranthene 200 U 200 8,000 RL-2,U 8 000 200 υ 200 1.000 RL-2,U 1,000 200 U 200 200 U 200 2,000 RL-2,U 2,000 1,000 RL-2,U 1.000 2,000 RL-2.U 2,000 150 6,000 RL-2,U 6,000 150 U 750 RL-2,U 750 150 U | 150 150 U 1 150 1,500 RL-2,U [1,500 750 RL-2,U 750 1,500 RL-2,U 1,500 U Benzo(g,h,i)perylene 2,000 RL-2,U 2,000 1,000 RL-2,U 1,000 2,000 RL-2,U 2,000 Benzo(k)fluoranthene 200 11 200 8,000 RL-2.U 8,000 200 U 200 1.000 RL-2.U 11.000 200 _U____200 200 U 200 Bis(2-chloroethyl)ether 100 100 4.000 RL-2,U 4.000 100 500 RL-2,U 100 U 10 100 U 100 1,000 RL-2.U 1,000 500 RL-2.U 500 1,000 RL-2.U 1,000 100 U 100 100 4.000 RL-2.U 4.000 1.000 RL-2.U 1.000 500 RL-2.U 500 1.000 RL-2.U 1.000 Bis(2-chloroisopropyl)ether U 100 U 100 500 RL-2.U 500 100 U 100 Bis(2-ethylhexyl)phthalate 500 500 20,000 RL-2,U 20,000 500 U 500 2,500 RL-2,U 2,500 500 U 500 500 U 500 5,000 RL-2,U 5,000 2,500 RL-2,U 2,500 5,000 RL-2,U 5,000 11 2,500 RL-2,U 2,500 500 20,000 RL-2,U 20,000 500 500 500 500 U 500 5,000 RL-2,U 5,000 2,500 RL-2,U 2,500 5,000 RL-2,U 5.000 Butyl benzyl phthalate U 500 U U 100 U 100 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 500 100 υ 100 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 500 1,000 RL-2,U 1,000 Chrysene 250 250 10,000 RL-2,U 10,000 U 250 1,300 RL-2,U 1,300 250 U 250 250 U 250 2,500 RL-2,U 2,500 1,300 RL-2,U 1,300 2,500 RL-2,U 2,500 Di-n-butyl phthalate 5,000 RL-2,U 5,000 5,000 RL-2,U 5,000 Di-n-octyl phthalate 500 - U 500 20,000 RL-2,U 20,000 500 U 500 2,500 RL-2,U 2,50 500 U 500 500 U 500 2,500 RL-2,U 2,500 250 250 10,000 250 U 250 250 U 250 2,500 RL-2,U 2,500 2,500 2,500 Dibenz(a,h)anthracene 10,000 RL-2,U 1,300 RL-2.U 250 1,300 RL-2,U RL-2,U 500 RL-2,U 500 500 RL-2,U 500 100 υ RL-2.U 4.000 100 U 100 1,000 RL-2,U 1,000 1,000 RL-2.U 1,000 Dibenzofuran 100 4.000 100 U 100 100 U 100 100 100 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 100 100 100 U 100 1,000 RL-2,U 1,000 500 RL-2.U 500 1,000 RL-2,U 1,000 Dimethyl phthalate U U 100 4.000 RL-2,U 4,000 100 U 500 RL-2.U 100 100 100 U 100 1.000 RL-2.U 1.000 500 RL-2.U 1.000 RL-2.U 1.000 luoranthene U 100 U 100 4,000 RL-2,U 4,000 100 U 100 500 RL-2,U 100 U 100 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 500 1,000 RL-2,U 1,000 luorene 200 200 8,000 RL-2.U 8,000 200 U 200 1,000 RL-2,U 1.000 200 U 200 2,000 RL-2,U 2,000 1,000 RL-2.U 1,000 2,000 RL-2,U 2,000 Indeno(1,2,3-cd)pyrene U 200 200 U 100 U 100 4,000 RL-2,U 4.000 100 U 100 500 RL-2,U 100 U 100 100 U 100 1,000 RL-2,U 1,000 500 RL-2,U 500 1,000 RL-2,U 1,000 n-Nitroso-di-n-propylamine 150 U 6,000 RL-2,U 6,00 150 R,U RL-2,U 150 U 150 1,500 RL-2,U 1,500 RL-2.U 1,500 RL-2.U 1.500 750 150 200 8 000 R1 -2 U 8 000 200 U 200 1.000 1 000 RL-2.U 1.000 2.000 RL-2.U 2.000 n-Nitrosodiphenylamine U 200 1.000 RL-2,U 200 U 200 200 U 200 2,000 RL-2,U 2,000 150 6,000 RL-2,U 6,000 150 M,R,U 150 1,500 RL-2,U 1,500 Naphthalene 150 750 RL-2,U 150 150 U 150 1,500 RL-2,U 1,500 750 RL-2,U U 2,500 RL-2,U 5.000 500 500 20.000 RL-2.U 500 U U 500 500 U 2.500 RL-2.U 5.000 Nitrobenzene U 20.00 2.500 RL-2.U 500 500 5,000 RL-2,U 1.5.000Pentachloropheno 500 500 20,000 RL-2,U 20,000 500 U 500 2,500 RL-2.U 500 U 500 500 U 500 5,000 RL-2,U 5,000 2,500 RL-2,U 2.500 5,000 RL-2,U 5.000 4,000 100 500 RL-2,U 1,000 100 100 4.000 RL-2.U 100 U 100 500 RL-2,U U 100 1,000 RL-2,U 1,000 RL-2.U 1.000 U 100 100 U Phenanthrene Phenol 150 U 150 6,000 RL-2,U 6.00 150 M,U 150 750 RL-2,U U 150 150 U 150 1,500 RL-2,U 1,500 750 RL-2,U 1,500 RL-2,U 1,500 1,500 RL-2,U 1,500 750 RL-2,U 1,500 150 U 1 150 6.000 RL-2.U | 6.000 150 U [150 750 RL-2.U 150 U 150 150 U 150 RL-2.U 1.50 Pyrene

Notes: M = The MS and/or MSD were otNotes: M = The MS and/or MSD were outside of the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

R = The RPD exceeded the method R = The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.

R = The RYD exceeded the method control limit raised due to high concentrations of hydrocarbons and by a clean-up procedure for Method 418.1 which reduces the total hydrocarbon concentration. This procedure results in the loss of semi-volatiles due to a loss of target analytes.

U = Constituent not detected above U = Constituent not detected above laboratory's reporting limits.



Subsurface Supplemental Investigation Table 4.2E

Semi-Volatile Organic Compounds Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

Page 3 of 3

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Sample Location	Parcel 24	L	ļ	Parcel 24	L	-	Parcel 22		Parcel 22	L	ļ	Parcel 22	<u> </u>		Parcel 22	L		Parcel 24	1.	L	Parcel 24			Parcel 24			Parcel 24	
Sample Number	WDI-SB-ID	P-10-11		WDI-SB-ID	P-10-20	2	WDI-SB-IDP-12-	5	WDI-SB-ID	P-12-15		WDI-SB-I	P-13-10	ļ	WDI-SB-ID	P-13-20	L	WDI-SB-II)P-14-5		WDI-SB-ID	P-14-10	L	WDI-SB-IDPF	D-14-10		WDI-SB-IDP-1	4-20
Sample Type	Waste	l		Native			Native		Native			Waste	<u></u>		Native			Waste	ļ		Waste		L	Waste			Native	
Sample Depth		L		20		↓	5		15		<u> </u>	13			20			14		L	10		J	10			20	
Sample Date	10/13/00			10/13/00	l	1	10/13/00		10/13/00		<u></u>	10/13/00	L	l	10/13/00			10/14/00	L	<u>. </u>	10/14/00			10/14/00			10/14/00	
Laboratory	Del Mar An	alytical		Del Mar An	alytical		Del Mar Analytica	ıl	Del Mar An	alytical	L	Del Mar Ar	alytical		Dei Mar An	alytical		Del Mar Ar	alytical		Del Mar Ana	alytical	I	Del Mar Analyt	tical		Del Mar Analyt	ıcal
Lab Sample ID	1JJ0523-04			1330523-05		T	1JJ0523-06		1330523-07			1JJ0523-08			1JJ0523-09			1JJ0531-01			1JJ0531-02			IJJ0531-03			1JJ0531-04	
Analysis Date	10/24/00			10/24/00		\Box	10/24/00		10/24/00			10/24/00		1	10/25/00			10/24/00			10/24/00		1	10/24/00			10/25/00	
	Result	Qual	RDL	Result	Qual	RDL	Result Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result Qu	ıal F	RDL	Result Qu	al RDL
	ug/kg			ug/kg		1	ug/kg		ug/kg			ug/kg		i	ug/kg			ug/kg			ug/kg		1 -	ug/kg			ug/kg	
1.2.4-Trichlorobenzene	5,000	RL-2.U	5,000	100	U	100	100 U	100	100	U	100	1,000	RL-2,U	1,000	100	U	100	1.000	RL-2,U	1,000	2,500	RL-2,U	2,500	5,000	RL-2.U	5,000	2,500 RI	-2,U 2,500
1.2-Dichlorobenzene	5,000	RL-2,U	5.000	100		100	100 U	100		U	100	1,000		1,000		Ü	100	1,000	RL-2,U	1.000	2,500	RL-2,U	2,500		RL-2.U	5,000		-2.U 2,500
1.3-Dichlorobenzene	5,000	RL-2,U	5,000	100		100	100 U	100	100	_	100			1,000	 	U	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500		RL-2,U	5,000		-2.U 2,500
1,4-Dichlorobenzene	5,000	RL-2.U	5.000	100		100	100 U	100	100		100			1,000	100	U	100	1.000	RL-2,U	1,000	2,500	RL-2,U	2,500		RL-2,U	5,000	$\overline{}$	-2,U 2,500
2.4.5-Trichlorophenol	7,500	RL-2,U	7,500	150		150	150 U	150	150		150	1,500		1,500		11	150	1,500	RL-2,U	1,500	3,800	RL-2,U	3,800		RL-2.U	7,500		-2,U 3,800
2,4,6-Trichlorophenol	7,500	RL-2,U	7,500	150		150	150 U	150			150	1,500		1.500	150	Ü	150	1.500	R12,U	1,500	3,800	RL-2,U	3,800	 	RL-2.U	7,500	3,800 RL	
2,4-Dichlorophenol	5,000	RL-2.U	5,000	100		100	100 U	100			100	1,000		1.000		U	100	1,000	RL-2,U	1,000	2.500	RL-2,U	2,500	 		5.000	2,500 RL	
	13,000	RL-2,U	13,000	250	-	250	250 U	250	250		250	2,500		2.500	250	_ ~	250	2,500	RL-2,U	2,500	6,300	RL-2,U	6,300			3.000	6,300 RL	
2,4-Dinitrophenol 2,4-Dinitrotoluene	5,000	RL-2,U	5,000	100	-	100	100 U	100	100		100	1,000		1.000	100	U	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500		RL-2,U	5,000		-2,U 2,500
2.4-Dinitrotolucne	5,000	RL-2,U	5,000	100		100	100 U	100	100		100	1,000		1,000	100	U	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500		RL-2,U	5.000		-2.U 2,500
2.6-Dinitrotoluene 2-Chloronaphthalene	5,000	RL-2,U	5,000	100		100	100 U		100		100	1,000		1,000	†	U U	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500		RL-2,U	5,000		-2.U 2.500
2-Unioronaphinaiene 2-Methylnaphthalene	5,000	RL-2,U	5,000	100		100	100 U	100	100		100	1,000		1,000	+	U	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500	 	RL-2.U	5.000		-2.U 2.500
	7,500	RL-2,U	7,500	150	-	150	150 U	150	150		150	1,500		1.500	150	U	150	1,500	RL-2,U	1,500	3,800	RL-2,U	3.800			7,500	2,500 RL 3,800 RL	
2-Methylphenol 2-Nitroaniline	10.000	RL-2,U	10,000	200	-	200	200 U		200	$\overline{}$	200	2.000		2.000	200	U	200	2,000	RL-2,U	2.000	5,000	RL-2,U	5,000			10.000	5,000 RL	
	5,000	RL-2,U	5,000	100	-	100	100 U	100	100		100	1,000		1,000	100	U	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500			5.000	2,500 RL	
2-Nitrophenol	25,000	RL-2,U	25,000	500		500	500 U		\vdash		500	5,000		5,000	500	U	500	5,000	RL-2,U	5.000	13,000	RL-2,U	13.000			25.000		-2.U 13.000
3,3-Dichlorobenzidine	13,000	RL-2,U	13.000	250	_	250	250 U	250	250		250	2,500	RL-2,U	2,500	250	U	250	2,500		2.500	6,300	RL-2,U	6,300			3.000	6,300 RL	
4,6-Dinitro-2-methylphenol	7,500	RL-2,U	7,500	150		150	150 U	150	150		150	1,500	RL-2,U	1.500	150	U	150	1,500	RL-2,U	1,500	3,800	RL-2,U	3,800			7,500	3,800 RL	
4-Bromophenyl phenyl ether	5,000		5.000	100		100	100 U	100	100	U	100	1,000	RL-2,U	1,000	100	11	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500			5.000	2,500 RL	
4-Chloro-3-methylphenol 4-Chloroaniline	5,000	RL-2,U RL-2,U	5.000	100	_	100	100 U	100	100	U	100	1,000	RL-2.U	1,000	100	U	100	1,000	RL-2,U	1.000	2,500	RL-2,U	2,500			5,000	2,500 RL	
		RL-2,U	5.000	100		100	100 U	100	100	U	100	1,000	RL-2,U	1,000	100	- 11	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500			5.000	2,500 RL	
4-Chlorophenyl phenyl ether	5,000 7,500	RL-2,U	7.500	150		150	150 U	1	150	- Č	150	1,500	RL-2,U	1,500		U	150	1,500	RL-2,U	1,500	3,800	RL-2,U	3.800			7,500	3,800 RL	
4-Methylphenol	25,000	RL-2,U	25.000	500		500	500 U	500	500		500	5,000	RL-2,U	5.000	500	U	500	5,000	RL-2,U	5.000	13,000	RL-2,U	13,000			25.000	13,000 RL	
4-Nitroaniline	5.000	RL-2,U	5,000	100	_	100	100 U		100		100	1.000	RL-2,U	1,000	100	U	100	1,000	RL-2.U	1,000	2,500	RL-2.U	2,500		RL-2.U 2	5.000	2,500 RL	
Acenaphthene Acenaphthylene	5,000	RL-2,U	5.000	100		100	100 U	100	100	11	100	1,000	RL-2.U	1,000	100	17	100	1,000	RL-2,U	1.000	2,500	RL-2,U	2,500			5.000	2,500 RL	
Anthracene	5,000	RL-2,U	5.000	100		100	100 U	100	100	U	100	1,000	RL-2,U	1.000	100	U	100	1,000	RL-2,U	1,000	2,500	RL-2,U	2,500			5.000		-2,U 2,500
Benzo(a)anthracene	5,000	RL-2,U	5.000	100		100	100 U	100	100	U	100	1,000	RL-2.U	1,000	100		100	1,000	RL-2.U	1,000	2,500	RL-2,U	2,500			5.000	2,500 RL	
	10,000	RL-2,U	10.000	200		200	200 U	200	200	U	200	2,000	RL-2,U	2.000	200	U	200	2.000	RL-2,U	2.000	5.000	RL-2,U	5.000			0.000		-2,U 5,000
Benzo(a)pyrene Benzo(b)fluoranthene	10,000	RL-2,U	10.000	200		200	200 U	200	200		200	2,000	RL-2,U	2.000	200	11	200	2.000	RL-2,U	2,000	5,000	RL-2,U	5,000			0.000		-2,U 5,000
Benzo(g,h.i)perylene	7,500	RL-2,U	7,500	150		150	150 U	150	150	1!	150	1,500	RL-2,U	1.500	150	11	150	1,500	RL-2,U	1.500	3.800	RL-2,U	3,800			7.500	3,800 RL	
Benzo(k)fluoranthene	10,000	RL-2,U	10.000	200	_	200	200 U	200	200	- 0	200	2,000	RL-2,U	2.000	200	U U	200	2.000	RL-2,U	2.000	5,000	RL-2,U	5,000			0.000	5,000 RL	
Bis(2-chloroethyl)ether	5.000	RL-2,U	5.000	100	_	100	100 U	100	100		100	1.000	RL-2.U	1,000	100	U	100	1.000		1,000	2,500	RL-2,U	2,500				2,500 RL	
	5,000	RL-2,U RL-2,U	5,000	100		100	100 U	100	100		100	1,000	RL-2,U	1.000	100	13	100	1,000	RL-2,U RL-2,U	1.000	2,500	RL-2,U	2,500			5,000	2,500 RL 2,500 RL	
Bis(2-chloroisopropyl)ether	25,000	RL-2,U	25.000	500		500	500 U	500	500	11	500	5,000	RL-2,U	5.000	500	U	500	5.000	RL-2,U	5.000	13.000	RL-2,U	13.000			5.000	2,500 RL	
Bis(2-ethylhexyl)phthalate	25,000	RL-2,U	25,000	500		500	500 U	500	500		500	5,000	RL-2,U	5.000	500	U	500	5.000	RL-2,U	5,000	13,000		13,000			5.000	13,000 RL	
Butyl benzyl phthalate	5,000	RL-2,U	5,000	100		100	100 U	100	100	11		1,000	RL-2,U	1.000	100	- 11	100	1.000	RL-2.U	1,000	2,500	RL-2,U	2,500			5,000		
Chrysene Di p hutul phthalata	13,000		13.000	250		250	250 U	250	250		100 250	2,500	RL-2,U	2,500	250	D	250	2,500		2.500	6,300	RL-2,U	<u> </u>			+		
Di-n-butyl phthalate		RL-2,U	25,000	500		500	500 U	500	500	- :-	500	5,000	RL-2,U	5.000	500	U	500	5,000	RL-2,U		13.000	RL-2,U	6,300			3,000	6,300 RL	
Di-n-octyl phthalate	25,000	RL-2,U				260		240	250	- 0	240			2.400					RL-2,U	5.000	(200	RL-2,U				3,000	13,000 RL	200
Dibenz(a,h)anthracene	13,000			250		250	250 U	250	100	+	250	2,500		2,500	250	U	250	2,500		2,500	6,300	RL-2.U	6,300		RL-2,U 1			2.0 6,300
Dibenzofuran Dimethyl phtholoto	5,000	RL-2,U	5,000	100		100		100			100			1,000	100	U	100	1,000		1,000	2,500	RL-2.U	2,500			5,000		2,U 2,500
Dimethyl phthalate	5,000		5,000	100		100		100	 -		100			1,000	100		100	1,000		1,000	2,500	RL-2,U	2,500			5,000		2,U 2,500
Fluoranthene	5,000		5.000	100		100	100 U	100			100			1,000	100	U	100	1,000		1,000	2,500	RL-2.U	2,500			5,000		2,U 2,500
Fluorene	5,000	RL-2,U	5.000	100		100	100 U	100	+		100			1,000	100		100	1,000		1,000	2,500	RL-2,U	2,500			5,000		2,U 2,500
Indeno(1,2,3-cd)pyrene	10,000	RL-2,U	10,000	200		200	200 U	200	200		200			2,000	200		200	2,000		2,000	5,000	RL-2,U	5,000			0,000		2,U 5,000
Isophorone	5,000	RL-2,U	5,000	100		100	100 U	100	100		100			1,000			100	1,000		1,000	2,500	RL-2,U	2,500			5,000		2.U 2,500
n-Nitroso-di-n-propylamine	7,500		7,500	150		150	150 U	150	150		150			1,500	150	U	150	1,500		1,500	3,800	RL-2,U	3,800			7,500		2,U 3,800
n-Nitrosodiphenylamine	10,000	RL-2,U	10,000	200		200	200 U	200	200	$\overline{}$	200			2,000	200		200	2,000		2,000	5,000	RL-2,U	5,000			0,000		2,U 5,000
Naphthalene	7,500		7,500	150		150	150 U	150	150		150			1,500	150	U	150	1,500		1,500	3,800	RL-2,U	3,800	-		7,500		2,U 3,800
Nitrobenzene	25,000	RL-2,U	25,000	500		500	500 U	500	500		500	5,000		5,000	500	υ	500	5,000		5,000	13,000	RL-2,U	13,000			5,000		2,U 13,000
Pentachlorophenol	25,000	RL-2,U	25,000	500		500	500 U	500	500		500	5,000	RL-2,U	5.000	500		500	5,000		5,000	13,000	RL-2,U	13,000			5,000		2.U 13,000
Phenanthrene	5,000	RL-2,U	5,000	100		100	100 U	100	100		100	1,000		1,000	100	U	100	1,000		1,000	2,500	RL-2,U	2,500			5,000	2,700 RI	
Phenol	7,500	RL-2,U	7,500	150		150	150 U	150	150	U	150	1,500		1,500	150	U	150	1,500		1,500	3,800	RL-2,U	3,800			7,500	-	2,U 3,800
Pyrene	7,500	RL-2,U	7.500	150	U	150	150 U	150	150	U	150	1,500	RL-2,U	1,500	150	U	150	1,500	RL-2,U	1,500	3,800	RL-2,U	3,800	7,500 F	RL-2,U	7,500		2,U 3,800
Notes: M = The MS and/or MSD were o	Notes: M = Th	e MS and/or MS	D were ou	itside of the acc	entance lim	nits due t	o sample matrix interfe	ence See	Blank Spike (1 C	(S).																	94 256 Rps RetBelinde	ReiRe 2011-101.jb)

R = The RPD exceeded the methor R = The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.

RL-2 = Reporting limit raised due to high concentrations of hydrocarbons and by a clean-up procedure for Method 418.1 which reduces the total hydrocarbon concentration. This procedure results in the loss of semi-volatiles due to a loss of target analytes.

U = Constituent not detected above U = Constituent not detected above laboratory's reporting limits.



Subsurface Supplemental Investigation Table 4.2F

Polychlorinated Biphenyls, Pesticides and Metals Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

																							Pa	ige 1 of 3
Sample Location	Parcel 41	1	ī	Parcel 41		Τ	Parcel 41	·	Т	Parcel 41	$\neg au$	Parcel 42	T		Parcel 42	1	Parcel 32	T	T	Parcel 32	T	Parcel 32	1	15013
Sample Number	WDI-SB-I	DP-1-5	1	WDI-SB-II	DP-2-9		WDI-SB-ID	PFD-2-9		WDI-SB-IDP-2-2	20	WDI-SB-I	DP-3-5		WDI-SB-IDP-3-2	20	WDI-SB-II	DP-4-4	1	WDI-SB-IDP-4	4-20	WDI-SB-II)P-5-6	1
Sample Type	Waste	T		Waste	T		Waste			Native		Fill	I	-	Native	İ	Waste			Native	1	Waste		
Sample Depth		3	1	9	,	†	9			20		1	5		20		4	i	1	20		6		
Sample Date	10/9/00		1	10/9/00			10/9/00			10/9/00		10/9/00	I	Ī	10/9/00		10/9/00	1		10/9/00		10/9/00		
Laboratory	Del Mar A	nalytical	T	Del Mar Ar	nalytical		Del Mar An	alytical		Del Mar Analytic	al	Del Mar A	nalytical		Del Mar Analytic	al	Del Mar Ar	nalytical		Del Mar Analy	tical	Del Mar Ar	nalytical	
Lab Sample ID	1JJ0283-01		1	1JJ0283-02			1JJ0283-03			1JJ0283-04		1JJ0283-05			1JJ0283-06		1JJ0283-07	1		1JJ0283-08	T	1JJ0283-09		1
Analysis Date	10/15/00)		10/15/00	1	1	10/15/00			10/19/00		10/19/00			10/15/00		10/19/00			10/15/00	1	10/19/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result Qual	RDL	Result	Qual	RDL	Result Qual	RDL	Result	Qual	RDL		al RDL		Qual	RDL
	ug/kg	1		ug/kg	1	1	ug/kg		1	ug/kg		ug/kg			ug/kg		ug/kg		1	ug/kg		ug/kg	1	
4,4'-DDD	50	RL-1,U	50		RL-1,U	50		RL-1,U	50		56	+	RL-1,U	50	5.0 U	5.0		RL-1,U	50	50 L	U 5.0	+	RL-1,U	50
4,4'-DDE		RL-1,C2,U	50		RL-1,C2,U	50		RL-1,C2,U	50					50		5.0		 -	50	5.0 L	U 5.0			50
4,4'-DDT		RL-1,C2,U	50	·	RL-1,C2,U	50	+	RL-1,C2,U	50					50	+	5.0			50	5.0 t	U 5.0	+	+	
Aldrin	50		50		+	50			50					50		5.0			50		U 5.0	+		50
alpha-BHC	50	+	50			50			50		$\overline{}$		+	50	+	5.0		+	50	5.0 L			 	50
beta-BHC	50		50			50		RL-1,U	50				+	50		5.0		+	50	5.0 L				50
Chlordane	500		500			500			500					500		50		+	500		U 50			500
delta-BHC	100		100			100			100	+				100		10			100	10 U				100
Dieldrin	50	 	50			50			50				†	50	5.0 U	5.0		+	50		U 5.0			50
Endosulfan I	50		50			50			50				+	50	5.0 U	5.0			50	5.0 t				50
Endosulfan II		RL-1,C2,U	50		RL-1,C2,U	50			50					50		5.0	+		50	5.0 t			RL-1,U	50
Endosulfan sulfate	100		100	100		100			100				+	100		10		+	100		U 10	100		+
Endrin	50	-	50	50		50			50				•	50		5.0	+	+	50		U 5.0			50
Endrin aldehyde	50		50		RL-1,C2,U	50			50	50 U			+	50		5.0		 	50		J 5.0		RL-1,C2,U	
Endrin aldenyde Endrin ketone	50	 	50		RL-1,C2,U	50			50	+		+	RL-1,C2,U	50		5.0		RL-1,C2,U	50	5.0 t		,		
gamma-BHC (Lindane)	50	+	50	50		50	+		50	50 U	-+-		+	50	+	5.0			50	5.0 t				50
Heptachlor	50		50	50	+	50			50	50 U	-		RL-1,U	50	5.0 U	5.0	50	,	50	5.0 t				50
Heptachlor epoxide	50	+	50	50	+	50		RL-1,U	50	50 U		·	<u> </u>	50		5.0			50	5.0 L				50
Methoxychlor	50		50	50		50			50		\rightarrow	+		50	•	5.0			50	5.0 U				+
Toxaphene	2,000		2,000	2,000		2.000		RL-1,U2,U	2.000	3,900	2.000			2,000	200 U	200		1	2.000	200 L		•		2,000
Analysis Date	10/16/00	KE-1,0	2,000	10/16/00	RE-1,0	2,000	10/16/00	KE-1,0	2,000	10/13/00		10/13/00		- 2,000	10/13/00	200	10/16/00	I KE-1.0	2.000	10/13/00	- 200	10/16/00	KL-1,0	2,000
Allarysis Date	10/10/00																							1
i .	Result	Qual	RDI	Result	Qual	RDI	Result	Qual	RDI		RDI	+		RDI		RDI	•	Oual	RDI		al RDI		Qual	RDI
-	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result Qual	RDL	Result	Qual	RDL	Result Qual	RDL	Result	Qual	RDL	Result Qu	al RDL	Result	Qual	RDL
Aroclor 1016	ug/kg		RDL 50	ug/kg			ug/kg		<u> </u>	Result Qual		Result ug/kg	Qual	RDL 50	Result Qual		Result ug/kg			Result Qu ug/kg		Result ug/kg		
Aroclor 1016 Aroclor 1221	ug/kg 50	U	50	ug/kg 1,000	RL-3,U	1,000	ug/kg 1,000	RL-3,U	1,000	Result Qual ug/kg 250 R13	J,U 250	Result ug/kg	Qual U		Result Qual ug/kg 50 U	50	Result ug/kg 2,500	RL-3.U	2,500	Result Qu ug/kg 50 U	50 ل	Result ug/kg 1,000	RL-3,U	1,000
Aroclor 1221	ug/kg 50 50	U		ug/kg 1,000 1,000	RL-3,U RL-3,U	1,000	ug/kg 1,000 1,000	RL-3,U RL-3,U	1,000	Result Qual ug/kg 250 RL-3 250 RL-3	i,U 250	Result ug/kg) 50	Qual U U	50	Result Qual		Result ug/kg 2,500 2,500	RL-3,U RL-3,U	2,500 2,500	Result Qu ug/kg 50 U 50 U	J 50 J 50	Result ug/kg 1,000 1,000	RL-3,U RL-3,U	1,000
Aroclor 1221 Aroclor 1232	ug/kg 50 50	U U U	50 50	ug/kg 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000	ug/kg 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3	i,U 250 i,U 250 i,U 250	Result ug/kg) 50) 50) 50	Qual U U	50	Result Qual ug/kg 50 U 50 U 50 U	50 50	Result ug/kg 2,500 2,500 2,500	RL-3.U RL-3.U RL-3,U	2,500 2,500 2,500	Result Qu ug/kg 50 U 50 U 50 U 50 U 50 U	J 50 J 50 J 50	Result ug/kg 1,000 1,000	RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000
Aroclor 1221	ug/kg 50 50	U U U U	50 50 50	ug/kg 1,000 1,000	RL-3,U RL-3,U	1,000	ug/kg 1,000 1,000	RL-3,U RL-3,U	1,000	Result Qual ug/kg 250 RL-3 250 RL-3	i,U 250 i,U 250 i,U 250 i,U 250	Result ug/kg 50 50 50 50 50 50	Qual U U U U	50 50 50	Result Qual ug/kg 50 U 50 U 50 U 50 U	50 50 50	Result ug/kg 2,500 2,500	RL-3,U RL-3,U	2,500 2,500	Result Qu ug/kg 50 U 50 U	J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000	RL-3,U RL-3,U	1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242	ug/kg 50 50 50	U U U U U U U	50 50 50 50	ug/kg 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000	1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3	3,U 250 3,U 250 3,U 250 3,U 250 3,U 250	Result ug/kg) 50) 50) 50) 50	Qual U U U U U U	50 50 50 50	Result Qual	50 50 50 50	Result ug/kg 2,500 2,500 2,500 2,500	RL-3,U RL-3,U RL-3,U RL-3,U	2,500 2,500 2,500 2,500	Result Qu ug/kg 50 U 50 U 50 U 50 U 50 U 50 U	J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248	50 50 50 50 50 50	U U U U U U U U U U U U U U U	50 50 50 50 50	ug/kg 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000	1,000 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3	3,U 250 3,U 250 3,U 250 3,U 250 3,U 250 3,U 250	Result ug/kg 50 50 50 50 50 50 50 50	Qual U U U U U U U U U	50 50 50 50 50	Result Qual	50 50 50 50	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 2,500	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	2,500 2,500 2,500 2,500 2,500	Result Qu ug/kg 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	50 50 50 50 50 50	U U U U U U U U U U U U U U U	50 50 50 50 50 50	ug/kg 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000	1,000 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3	3,U 250 3,U 250 3,U 250 3,U 250 3,U 250 3,U 250	Result ug/kg) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U	50 50 50 50 50 50	Result Qual ug/kg	50 50 50 50 50	Result ug/kg 2,500 2,500 2,500 2,500 2,500	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	2,500 2,500 2,500 2,500 2,500 2,500	Result Qu ug/kg 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3	3,U 250 3,U 250 3,U 250 3,U 250 3,U 250 3,U 250 3,U 250	Result ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	Qual U U U U U U U U U	50 50 50 50 50 50	Result Qual ug/kg	50 50 50 50 50 50	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	2,500 2,500 2,500 2,500 2,500 2,500	Result Qu ug/kg 50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	ug/kg 50 50 50 50 50 50 50 10/17/00 Result	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3	3,U 250 3,U 250 3,U 250 3,U 250 3,U 250 3,U 250 3,U 250	Result ug/kg 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	Qual U U U U U U U U U U U	50 50 50 50 50 50 50	Result Qual ug/kg 50 U 60 Esult Qual	50 50 50 50 50 50	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	2,500 2,500 2,500 2,500 2,500 2,500 2,500	Result Qu ug/kg 50 50 L 10/17/00 Result Qu Qu	J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	ug/kg 50 50 50 50 50 50 50 10/17/00	U U U U U U U	50 50 50 50 50 50 50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 10/18/00	3,U 256 3,U 256 3,U 256 3,U 256 3,U 256 3,U 256 3,U 256 4,U 256 4,U 256	Result ug/kg 50 50 50 50 50 50 50 50 50 50 50 80 10/17/00 Result mg/kg	Qual U U U U U U U U U U U	50 50 50 50 50 50 50	Result Qual ug/kg 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	50 50 50 50 50 50	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 2,500 0,1017/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	2,500 2,500 2,500 2,500 2,500 2,500 2,500	Result Qu ug/kg 50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date	ug/kg 50 50 50 50 50 50 50 10/17/00 Result	U U U U U U U	50 50 50 50 50 50 50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 10/18/00 Result Qual mg/kg	3U 250 3U 250	Result ug/kg) 50) 50) 50) 50) 50) 50 0 50 0 50	Qual U U U U U U U Qual	50 50 50 50 50 50 50 70	Result Qual ug/kg	50 50 50 50 50 50 50 RDL	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	2,500 2,500 2,500 2,500 2,500 2,500 2,500 RDL	Result Qu ug/kg 50 50 L 10/17/00 Result Qu mg/kg	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	1,000 1,000 1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum	ug/kg 50 50 50 50 50 50 50 60 60 10/17/00 Result mg/kg 22,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 Result Qual mg/kg 22,000 RL-3	3U 250 3U 3U 250 3U 3U 3U 3U 3U 3U 3U 3U	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U C U U U U U U U U U U U U	50 50 50 50 50 50 50 70	Result Qual ug/kg	500 500 500 500 500 500 RDL	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 2.500 8.500 10/17/00 Result mg/kg 9.500 10	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 RDL	Result Qu ug/kg 50 50 U 50 U 50 U 50 U 50 U 50 U 10/17/00 Result Qu mg/kg 5.00 U	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony	ug/kg 50 50 50 50 50 50 10/17/00 Result mg/kg 22,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 8DL	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL	Result Qual ug/kg 250 RL-3 250	JU 250 JU 250 JU 250 JU 250 JU 250 JU 250 RDL 3 20 JU	Result ug/kg)	Qual U U U U U U U Qual	50 50 50 50 50 50 50 80 RDL	Result Qual ug/kg	500 500 500 500 500 500 RDL	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 6.700	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 RDL	Result Qu ug/kg 50 50 U 50 U 50 U 50 U 50 U 50 U 10/17/00 U Result Qu mg/kg 5,100 10 U	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic	og/kg 50 50 50 50 50 50 60 50 60 60 10/17/00 Result mg/kg 22,000 10 4.9	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 8DL	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2.0	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 RDL	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 20 RL-3 31 RL-3 31 RL-3 250 RL-3 31 RL-3 250 RL-3 31 RL-3 250 RL-3 31 RL-3 250 RL-3 31 RL-3 250 RL-3 250 RL-3 31 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 31 RL-3 250	JU 250 JU 250 JU 250 JU 250 JU 250 JU 250 JU 250 JU 200 JU 200	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U C U U U U U U U U U U U U	50 50 50 50 50 50 50 70 8DL	Result Qual ug/kg	500 500 500 500 500 500 RDL 100 2.0	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 6.700	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 RDL 10 10	Result Qu ug/kg 50 50 L 10/17/00 Result Qu mg/kg 5,300 L 10 U 5,0 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 4.1 290	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2.0	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 10 4.1	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000 1,000 1,000 1,000 1,000 RDL	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 31 RL-230 RL-3 31 RL-230 RL-3	3.U 256 3.U 26 4.U 30 4.U	Result ug/kg 50 50 50 50 50 50 50 50 50 50 10/17/00 Result mg/kg 110,000 110 3.8	Qual U U U U U U C U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0	Result Qual ug/kg	500 500 500 500 500 500 8DL 100 2.00	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 8,9	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10	Result ug/kg Qu 50 L 10/17/00 Result Qumg/kg S.300 10 U 5.0 S.0 5.5 S.5	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2,0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0 1.0	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 12,000 13,000 14,1	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2.0 1.00	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 10 4.11 280 0.50 0.58	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2.0 1.0 0.50	Result Qual ug/kg	3 2C 3 2.0 3 2.0 3 2.0 3 2.0 3 2.0 3 2.0 3 2.0 3 4.0 3 2.0 3 2.0 4 0.0 1 0	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0 1.0	Result Qual ug/kg	500 500 500 500 500 500 8DL 100 2.00 1.00	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 8,99 840	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2.0 1.0	Result Qu ug/kg 50 U	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 6.1 910 0.50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 4.1 290 0.50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2.0 1.0:50 0.50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0.50 0.58 12,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 31 RL-2 30 RL-3 1.0 RL-3 1.0 RL-3 6,700 RL-3	3 20 3 20 3 20 3 3 4.0 3 3 2.0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8DL 100 1.00 0.500	Result Qual ug/kg	50 50 50 50 50 50 8DL 10 2.0 1.0 0.50	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 8,9 840 0,50 1,000	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2.0 1.0 0.50	Result ug/kg Qu 50 U 10/17/00 Result Qumg/kg S.300 10 U 5.0 U 5.0 U 5.5 0.50 0.50 U	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 6.11 910 0.50 0.66 11,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium	ug/kg 50 50 50 50 50 50 50 10/17/00 Result mg/kg 22,000 4,9 110 0.545 0.550 2,800	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 0.50 0.50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result 12,000 4.1 290 0.50 0.52 9,200	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000	ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2.0 0.50 0.50	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 10/18/00 Result mg/kg 22,000 RL-3 31 RL-230 RL-3 1.0 RL-3 1.0 RL-3 6,700 RL-6 63 RL-6 63 RL-250 RL-6 63 RL-6 65 RL-2 250 RL-6 63 RL-6 65 RL-2 250 RL-6 63 RL-6 63 RL-6 65 RL-2 250 RL-6 65 RL-6 85	(JU 250 JU 250 JU 250 JU 250 JU 250 JU 250 JU 250 RDL RDL 3 20 JU 20 3 4.0 3 2.0 JU 1.0 JU 1.0 JU 1.0 JU 1.0 JU 1.0 JU 250 JU 250	Result ug/kg)	Qual U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50	Result Qual ug/kg	500 500 500 500 500 500 8DL 100 100 100 500 500 100 100 100 100 100	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 8,9 840 0,50 1,000	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 10 1.0 0.50 0.50	Result Qu ug/kg 50 50 U 50 U 50 U 50 U 50 U 50 U 10/17/00 Result Qu Mg/kg 5.300 U 5.0 U 5.0 U 0.50 U 0.50 U 1,700 U	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 6.1 910 0.50 0.66 11,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 8DL 10 2.0 1.0 0.50 0.50	ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2,0 1,00 0.50 0.50	ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 10/18/00 Result Qual mg/kg 22,000 RL-3 31 RL-230 RL-3 1.0 RL-3 6,700 RL-6 3 RL-6 21 RL-221 RL-	(JU 250 JU 250 JU 250 JU 250 JU 250 JU 250 JU 250 RDL 3 20 JU 20 3 4.0 3 2.0 JU 1.0 3 30 3 2.0 JU 1.0 JU 1.0	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0 1.50 0.50 0.50	Result Qual ug/kg	500 500 500 500 500 500 500 500 100 1.00 0.500 0.500 1.500	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 2.500 10/17/00 Result mg/kg 9.500 8.9 8.40 0.50 1.0 19,000	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 10 1.0 0,50 0,50	Result Qu yg/kg 50 50 L 10/17/00 C Result Qu mg/kg 5,300 10 U 5,0 U 5,0 U 0,50 U 1,700 R 8,8 R	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50 0.50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1 290 0.50 9,200 21 8.2	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0,50 9,58 12,000 18 7,4 17,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10 10 10 0.50 1.50 1.00 1.00 1.00 1.	Result Qual ug/kg	3 20 3 20 3 3 3 3 3 20 3 3 20	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0 1.50 0.50 1.50	Result Qual ug/kg	500 500 500 500 500 500 500 500 100 1.00 0.500 0.500 1.500 1.000	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 10.17/00 Result mg/kg 9.500 8.9 8.40 0.50 1.0 19,000 28 6.5	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2.0 1.0 0.50 0.50 1.5	Result Qu yg/kg 50 50 U 10/17/00 Result Quamp/kg 0 5,300 U 5,0 U 0,50 U 1,700 Result 8,8 3,9	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 70 10 10 2.0 1.0 0.50 0.50 15 1.0	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1 290 0.50 0.52 9,200 21 8.2	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 2,0 1,00 1,00 10 1,00 10 1,00 1,00 1	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0.50 0.58 12,000 18 7.4 17,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000	Result Qual ug/kg	3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 40 3 20 3 40 3 40 3 40 4 40	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 10 10 2.0 0.50 0.50 1.0 1.0	Result Qual ug/kg	500 500 500 500 500 500 500 700 100 100 100 100 100 100 100 100 1	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 10/17/00 Result mg/kg 9.500 10 8.9 8.40 0.50 1.0 19,000 28 6.5	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 0,50 0,50 1,0 1,0 1,0	Result Qu yg/kg 50 50 U 10/17/00 Result Quamg/kg Quamg/kg 5,300 U 5,0 U 5,0 U 0,50 U 1,700 Result 3,9 10,000	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1001 Result mg/kg 12,000 10 6.1 910 0.50 0.66 11,000 29 7.9 17,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 2.0 0.50 0.50 1.0 0.50 1.0 0.50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1 290 0.50 0.52 9,200 21 8.2 16,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 RDL 10 0,50 0,50 1,50 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0,50 9,58 12,000 18 7,44 17,000 5,54	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000	Result Qual ug/kg	3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 100	Result Qual ug/kg	500 500 500 500 500 500 500 100 100 100	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 8.9 840 0,50 1,0 19,000 28 6,5 16,000 470	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2,0 1,0 0,50 0,50 15 1,0 1,0 1,0 2,0	Result	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 6.1 910 0.50 0.66 11,000 29 7.9 17,000 93 6,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 50 10 2.0 0.50 0.50 15 1.0 0.50 0.50 0.50	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1 290 0.50 0.52 9,200 21 8.2 16,000 41 5,700	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00 2,0 1,00 1,0	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0.50 0.58 12,000 18 7.4 17,000 54 5,400	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,000 1,000	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 21 RL-2 30 RL-3 31 RL-2 30 RL-3 31 RL-2 30 RL-3 31 RL-2 30 RL-3 31 RL-2 30 RL-3 31 RL-2 30 RL-3 31 RL-2 30 RL-3 31	3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 1.00 0.500 1.00 1.	Result Qual ug/kg	500 500 500 500 500 500 700 100 100 100 100 100 100 100 100 1	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 8,9 840 0,50 1,0 19,000 28 6,5 16,000 470 5,800	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U U	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2,0 1,0 0,50 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,	Result Qu ug/kg 50	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 6.1 910 0.50 0.66 11,000 29 7.9 17,000 93 6,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese	ug/kg 50 50 50 50 50 50 50 10/17/00 Result mg/kg 22,000 4,9 110 0.54 0.550 2,800 24 7.0 1900 155 4,400	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result 12,000 4.1 290 0.50 0.52 9,200 21 8.2 16,000 41 5,700	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00 1,0 0,50 0,5	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 10 4.1 280 0.50 0.58 12,000 18 7.4 17,000 54 5,400 360 0.096	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,00C 1,00C	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 21 RL-2 230 RL-3 10 RL-3 230 RL-3 10 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 23000 RL-3 23000 RL-3 23000 RL-3 23000 RL-3 23000 RL-3 23000 RL-3 23000 RL-1 11 RL-1 11,000 RL-1 1,000 RL-1 1,000 RL-1 1,000 RL-3 25	3 20 3 20	Result ug/kg)	Qual U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 100	Result Qual ug/kg	500 500 500 500 500 500 500 100 2.0.50 0.50 15.0.0 1.0.0 2.0.0 1.0	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 8,9 840 0,50 1,0 19,000 28 6,5 16,000 470 5,800	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U U	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2,0 1,0 0,50 15 1,0 1,0 1,0 1,0 1,0 1,0 1,0	Result Qu ug/kg 50 50 U 50 U 50 U 50 U 50 U 50 U 10/17/00 Result Qu 10 W/kg 5,300 10 U 5.0 U 0.50 U 1,700 0 8.8 3.9 10,000 2.4 3,000 150	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 6.1 910 6.1 910 0.50 0.66 11,000 29 7.9 17,000 93 6,000 320 0.20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnessum Manganese Mercury	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50 1.5 1.0 1.0 0.20 1.0 0.20	ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00 1,0 1,	ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U Qual	1,00C 1,00C	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 10/18/00 RL-3 10 RL-	3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 100	Result Qual ug/kg	500 500 500 500 500 500 500 100 100 0.500 15 1.00 1.00	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 2.500 10/17/00 Result mg/kg 9.500 10 8.9 8.40 0.50 1.0 19,000 28 6.5 16,000 470 5.800 260 0.19	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 0,50 0,50 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,	Result Qu ug/kg 50 50 U 50 U 50 U 50 U 50 U 50 U 10/17/00 Result Result Qu mg/kg 5,300 10 U 5,0 U 0.50 U 1,700 U 1,700 U 8,8 3,9 10,000 U 2,4 3,000 150 0,053	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 10 2.0 1.0 J 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 6.1 910 0.50 0.66 11,000 29 7.9 17,000 93 6,000 320 0.20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Cadmium Chromium Chobalt Iron Lead Magnesium Manganese Mercury Nickel	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 0.50 0.5	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1 290 0.50 0.52 9,200 21 8.2 16,000 41 5,700 280 0.097	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00 1,0 1,	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 10 4.1 280 0.50 0.58 12,000 18 7,4 17,000 5,4 5,400 0.096 15 2.0	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 10 0.50 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 10/18/00 Result Qual mg/kg 22,000 RL-3 31 RL-230 RL-3 1.0 RL-3 1.0 RL-3 6,700 RL-3 32,000 RL-11,000 RL-11,000 RL-11,000 RL-10,000 RL-0.25 260 RL-3 260 RL-0.25 260 RL-3 250 RL-0.25 RL-0.25 RL-3 250 RL-0.25 RL-0.25 RL-0.25 RL-3 250 RL-0.25 R	3 20 3 20 3 20 3 20 3 20 3 40 3 20 3 40 3 20 3 40 3 20 3 40 3 40 4 4 40 4 4 40 4 4 40 4 4 40 4 4	Result ug/kg)	Qual U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 1.00 0.500 1.00 1.	Result Qual ug/kg	500 500 500 500 500 500 100 1.00 5.00 1.00 5.00 1.00 1	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 2.500 10.17/00 Result mg/kg 9.500 10 8.9 8.40 0.50 1.0 19,000 28 6.5 16,000 470 5.800 260 0.19	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U Qual	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2,0 1,0 0,50 0,50 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,	Result	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 10 2.0 1.0 J 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	Result ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50 0.50 0.50 0.50 0.50 0.5	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1 290 0.50 9,200 21 8.2 16,000 41 5,700 280 0.097 17	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10 10 0,50 0,5	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0.50 9.58 12,000 18 7.4 17,000 54 5,400 360 0.096 15 2.0 870	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	1,00C 1,00C	Result Qual ug/kg	3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20 3 20	Result ug/kg) 50) 50) 50) 50) 50) 50) 50) 50	Qual U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 0.500 0.500 1.00 1.	Result Qual ug/kg	500 500 500 500 500 500 100 1.00 0.500 0.500 1.00 1.	Result ug/kg 2.500 2.500 2.500 2.500 2.500 2.500 2.500 10.17/00 Result mg/kg 9.500 10 8.9 8.40 0.50 1.0 19,000 28 6.5 16,000 470 5.800 0.19	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U U	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 2.0 1.0 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	Result Qu yg/kg 50 50 U 10 Ou mg/kg U 5.0 U 5.0 U 1,700 U 8.3 3.9 10,000 2.4 3,000 150 0.053 7.2 2.0 U	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 10 J 10	Result ug/kg 1,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnessum Manganese Mercury Nickel Selenium Sodium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 0.50 0.50 0.50 0.50 0.50 0.5	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 4.1 290 0.50 0.52 9,200 211 8.2 16,000 41 5,700 280 0.097 17 2.0	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0.50 0.58 12,000 18 7,4 17,000 5,4 5,400 360 0.096 15 2.0 870	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 10 10 0.50 0.50 1.00 1.00 1.00 1.00 1.0	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 21 RL-2 230 RL-3 2300 RL-3 21 RL-2 230 RL-3 21 RL-1 11 RL-1 11,000 RL-3 2500 RL-3 21 RL-1 11 RL-1 11,000 RL-3 2000 RL	3 20 10 10 10 10 10 10 10	Result ug/kg)	Qual U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 1.00 1.0	Result ug/kg 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	500 500 500 500 500 500 100 100 100 100	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 10,50 1,0 19,000 28 6,5 16,000 470 5,800 260 0,19 19	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U U U	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2.0 1.0 0,50 1.0 1.0 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	Result Qu ug/kg 50 U J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 10 J 10	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10 6.1 910 0.50 0.66 11,000 29 7.9 17,000 93 6,000 320 0.20 18 2.0	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00	
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Chromium Chobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium Thallium	ug/kg 500 500 500 500 500 500 500 500 500 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 10 10 2.0 0.50 1.0 1.0 1.0 0.020 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result 12,000 4.1 290 0.50 0.52 9,200 21 8.2 16,000 41 5,700 280 0.097 17 2.0 830	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	1,000 1,000	ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 9,400 4.1 280 0.50 0.58 12,000 18 7.4 17,000 54 5,400 360 0.096 15 2.0 870 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 1,00C 10 0,50 0,50 0,50 1,00 1,00 1,00C 1,	Result Qual ug/kg 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 250 RL-3 21 RL-2 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 230 RL-3 2300 RL-3	RDL 250, U 250,	Result ug/kg)	Qual U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 1.00 5.00 1.00 1	Result Qual ug/kg	500 500 500 500 500 500 100 100 100 100	Result ug/kg 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10/17/00 Result mg/kg 9,500 10 10,500 1,000 28 6.5 16,000 470 5,800 260 0,19 19 2,0 900 10 32	RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U RL-3.U U U	2,500 2,500 2,500 2,500 2,500 2,500 2,500 2,500 10 10 10 2,0 1,0 0,50 15 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0	Result Qu ug/kg 50	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	Result ug/kg 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 10/17/00 Result mg/kg 12,000 10,50 0.66 11,000 29 7,9 17,000 933 6,000 320 0.20 18 2.0 960 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,00 0,50 0,5

Notes: A-01 = Sample used for MS/MSD was subcontracted to Del Mar Analytical, Colton Laboratory. Therefore MS/MSD results were not reported.



C1 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form, 131

C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 51

RL-1 = Reporting limit raised due to sample matrix interference.

RL-3 = Reporting limit raised due to high concentrations of non-target analytes.

U = Constituent not detected above laboratory's reporting limits.

Subsurface Supplemental Investigation Table 4.2F

Polychlorinated Biphenyls, Pesticides and Metals Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

																								Pag	ge 2 of 3
Sample Location	Parcel 32			Parcel 12			Parcel 12	T		Parcel 21			Parcel 21	[Parcel 21	1	Parcel 44			Parcel 44		T	Parcel 24		
Sample Number	WDI-SB-I	DP-5-15	1	WDI-SB-II	DP-6-5		WDI-SB-II	DP-6-15		WDI-SB-ID	P-7-5		WDI-SB-IDPFD-7-5	\$	WDI-SB-IDP-	7-15	WDI-SB-ID	P-8-5		WDI-SB-II	DP-8-9	1	WDI-SB-ID	P-10-6	
Sample Type	Native	1		Fill		T	Native	T		Waste			Waste	1	Native		Waste			Waste		1	Fill		
Sample Depth	1:	5		9	5	Ī	15	5		5			5		15		8		1	9	9		6		
Sample Date	10/9/00			10/10/00			10/10/00	1		10/12/00			10/12/00		10/12/00		10/12/00			10/12/00			10/13/00		
Laboratory	Del Mar A	nalytical		Del Mar Ai	nalytical		Del Mar Ai	nalytical		Del Mar Ar	alytical		Del Mar Analytical		Del Mar Analy	tical	Del Mar An	alytical		Del Mar A	nalytical		Del Mar An	alytical	
Lab Sample ID	1JJ0283-10			1330315-01	T		1JJ0315-02	T		1330445-01			1330445-02		IJJ0445-03		1JJ0445-04			IJJ0445-05			1JJ0523-03		
Analysis Date	10/19/00			10/15/00	,		10/15/00			10/25/00			10/20/00		10/19/00		10/19/00			10/19/00	0	Ť	10/20/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result Qual	RDL	Result Qu	al RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL
	ug/kg	1		ug/kg			ug/kg			ug/kg			ug/kg		ug/kg		ug/kg			ug/kg			ug/kg		+-1
4,4'-DDD	5(RL-1,U	50	+	RL-1,U	50		Ū	5.0	50	RL-1,U	50	 	10	5.0 L	j 5.	50	RL-1,C1,U	50	25	RL-1,C1,U	25	50	RL-1,C1,U	50
4,4'-DDE	50		50	50	RL-1,C2,U	50			5.0	50	RL-1,U	50	10 A-01,U	10	5.0 1) 5.	50	RL-1,U	50			25	• 	RL-1,U	50
4,4'-DDT		RL-1,C2,U	50		RL-1,C2,U	50			5.0	50	RL-1,C2,U	50	10 A-01,U	10	5.0	J 5.	50	RL-1,C2,U	50		RL-1.C2.U	_		RL-1,C2,U	50
Aldrin	50		50		+	50		-	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 (J 5.	50	RL-1,U	50			25	50	RL-1,U	50
alpha-BHC	50		50	50	RL-1,U	50	5.0	U	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 t	J 5.	50	RL-I,U	50	25	RL-1,U	25	50	RL-1,U	50
beta-BHC	50		50			50	5.0	υ	5.0	50	RL-I,U	50	10 A-01,U	10	5.0 L	J 5.	50	RL-1,U	50	25	RL-1,U	25	50	RL-1,U	50
Chlordane	500	RL-1,U	500	500	RL-1,U	500	50	υ	50	500	RL-1,U	500	100 A-01,U	100	50 t	J 50	500	RL-1,U	500	250	RL-1,U	250	500	RL-1,U	500
delta-BHC	100	+	100	100	RL-1,U	100			10	100	RL-1,U	100	20 A-01,U	20	10 1	J 10	100	RL-1,U	_100	50	RL-1.U	50	100	RL-1,U	100
Dieldrin	50		50	50	RL-I.U	50	5.0	U	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 t	J 5.	50	RL-I,U	. 50	25	RL-1,U	25	50	RL-1,U	50
Endosulfan I	50		50			50	5.0	U	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 1) 5.0	50	RL-1,U	50	25		25	50	RL-1,U	50
Endosulfan II	50	RL-1,U	50	50	RL-1,C2,U	50	5.0	U	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 (3 5.	50	RL-1,U	50	25	RL-1,U	25	50	RL-1,U	50
Endosulfan sulfate	100	RL-1,C2,U	100	100	RL-1,C2,U	100	10	υ	10	100	RL-1,U	100	20 A-01.U	20) 10 t			RL-1,U	100			50	100	RL-1,U	100
Endrin	50	. , .	50	50	RL-1,U	50	5.0	บ	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 L	J 5.	50	R11,U	50	25	RL-1,U	25	50	RL-1,U	50
Endrin aldehyde	50	RL-1,C2,U	50	50	RL-1,C2,U	50	5.0		5.0	50	RL-1,U	50		10			+	RL-1,U	50	25	RL-1,U	25	50	RL-1,U	50
Endrin ketone	50	RL-1,C2,U	50	50	RL-1,C2,U	50	5.0	U	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 L	J 5.0	50	RL-1,C2,U	50	25	RL-1,C2,U	25	50	RL-1,C2,U	50
gamma-BHC (Lindane)	50) RL-1,U	50	50	RL-1,U	50	5.0	U	5.0	50	RL-1,U	50	10 A-01,U	10	5.0 L			RL-1.U	50	25	RL-1,U	25	50	RL-1,U	50
Heptachlor	5(+	50	50	+	50		+	5.0	50		50		10			+	RL-1,U	50	25		25	50		50
Heptachlor epoxide	50		50			50		+	5.0	50		50		10	 			RL-1,U	50	25		25	50		50
Methoxychlor	50	1 11 11 11 11 11	+	50	RL-1,C2,U	50		-	5.0		RL-1,C2.U	50	10 A-01,U	10	+ · · · · · · · · · · · · · · · · · ·			RL-1,C2.U	50	25		25	50	RL-1,C2,U	-
Toxaphene	2,000	+	2,000	2,000	RL-1,U	2,000	200		200	2,000	RL-1,U	2,000	400 A-01,U	400		J 200	-,	RL-I,U	2,000	1,000		1,000	2,000	RL-1,U	2,000
Analysis Date	10/16/00		 	10/12/00	1	l	10/12/00			10/26/00			10/20/00		10/20/00		10/20/00			10/20/00	+		10/21/00		1
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL		Qual	RDL		RDL	 	al RDL	+	Qual	RDL	Result	Qual	RDL		Qual	RDL
	ug/kg																								
Aroclor 1016				ug/kg	 		ug/kg			ug/kg			ug/kg		ug/kg		ug/kg			ug/kg			ug/kg		
	50		50	50		50	50		50	50	U	50	50 U	50	50 L		50	U	50	50	+	50	50	U	50
Aroclor 1221	50	U	50	50 50	U	50	50 50	U	50	50 50	U	50	50 U 50 U	50	50 L 50 L	J 50	50	U	50	50 50	U	50	50 50	U	50
Aroclor 1221 Aroclor 1232	50 50 50) U	50	50 50 50	U	50 50	50 50 50	U U	50 50	50 50 50	U U	50 50	50 U 50 U 50 U	50	50 U 50 U 50 U	J 50	50 50 50 50	U U	50 50	50 50 50	U U	50	50 50 50	U U	50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242	50 50 50 50) U	50 50 50	50 50 50 50	U U U	50 50 50	50 50 50 50	U U U	50 50 50	50 50 50 50	บ บ บ	50 50 50	50 U 50 U 50 U 50 U	50 50 50	50 L 50 L 50 L 50 L	J 50 J 50 J 50	50 50 50 50 50	υ υ υ	50 50 50	50 50 50 50	U U U	50 50 50	50 50 50 50	U U	50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248	50 50 50 50	0 U 0 U 0 U	50 50 50 50	50 50 50 50	U U U	50 50 50 50	50 50 50 50 50	U U U U	50 50 50 50	50 50 50 50 50	บ บ บ	50 50 50 50	50 U 50 U 50 U 50 U 50 U	50 50 50	50 L 50 L 50 L 50 L 50 L) 50) 50) 50 J 50	50 50 50 50 50 50 50	U U U	50 50 50	50 50 50 50 50	U U U U	50 50 50	50 50 50 50 50	U U U	50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	50 50 50 50 50) U) U) U) U	50 50 50 50 50	50 50 50 50 50 50	U U U U	50 50 50 50 50	50 50 50 50 50 50	U U U U	50 50 50 50 50	50 50 50 50 50 50	บ บ บ บ	50 50 50 50 50	50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50	50 L 50 L 50 L 50 L 50 L) 50) 50) 50 J 50 J 50	50 50 50 50 50 50 50 50	U U U U	50 50 50 50 50	50 50 50 50 50 50	U U U U	50 50 50 50 50	50 50 50 50 50 50	U U U U	50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	50 50 50 50 50 50) U 0 U 0 U 0 U 0 U	50 50 50 50	50 50 50 50 50 50 50	U U U U U	50 50 50 50	50 50 50 50 50 50 50	U U U U U	50 50 50 50	50 50 50 50 50 50 50	บ บ บ	50 50 50 50	50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50	50 L 50 L 50 L 50 L 50 L 50 L 50 L) 50) 50) 50 J 50 J 50	50 50 50 50 50 50 50 50 50	U U U	50 50 50	50 50 50 50 50 50 50	U U U U U	50 50 50	50 50 50 50 50 50 50	U U U	50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	50 50 50 50 50 50 50 10/17/00	0 U 0 U 0 U 0 U 0 U 0 U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/18/00	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 50 10/18/00	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/23/00	บ บ บ บ บ	50 50 50 50 50 50	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U 10/23/00	50 50 50 50 50	50 t 50 t 50 t 50 t 50 t 50 t 50 t 50 t) 50) 50) 50) 50) 50) 50	50 50 50 50 50 50 50 50 50 50 10/23/00	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/23/00	U U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/26/00	U U U U U	50 50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	50 50 50 50 50 50 50 10/17/00 Result) U 0 U 0 U 0 U 0 U	50 50 50 50 50	50 50 50 50 50 50 50 10/18/00 Result	U U U U U	50 50 50 50 50	50 50 50 50 50 50 50 50 10/18/00 Result	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/23/00 Result	บ บ บ บ บ	50 50 50 50 50 50	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50	50 t 50 t 50 t 50 t 50 t 50 t 50 t 50 t) 50) 50) 50 J 50 J 50	50 50 50 50 50 50 50 50 50 10/23/00 Result	U U U U	50 50 50 50 50	50 50 50 50 50 50 50 10/23/00 Result	U U U U U	50 50 50 50 50	50 50 50 50 50 50 50 10/26/00 Result	U U U U	50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date	50 50 50 50 50 50 50 10/17/00 Result mg/kg	0 U 0 U 0 U 0 U 0 U 0 U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/18/00 Result mg/kg	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/18/00 Result	U U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/23/00 Result	บ บ บ บ บ	50 50 50 50 50 50	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50	50 t 50 t 50 t 50 t 50 t 50 t 50 t 10/23/00 Result Qu) 50) 50) 50) 50) 50) 50	50 50 50 50 50 50 50 10/23/00 Result mg/kg	U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/23/00 Result	U U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/26/00	U U U U U	50 50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	50 50 50 50 50 50 50 10/17/00 Result	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/18/00 Result	U U U U U	50 50 50 50 50 50 80	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000	U U U U U U	50 50 50 50 50 50 50	50 50 50 50 50 50 50 10/23/00 Result	บ บ บ บ บ	50 50 50 50 50 50	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50 50 RDL	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000	U U U U U	50 50 50 50 50 50 70	50 50 50 50 50 50 50 10/23/00 Result	U U U U U U	50 50 50 50 50 50 70	50 50 50 50 50 50 50 10/26/00 Result	U U U U U	50 50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000	U U U U U U	50 50 50 50 50 50 80	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000	U U U U U U Qual RL-3	50 50 50 50 50 50 50 RDL	50 50 50 50 50 50 50 10/23/00 Result mg/kg	U U U U U U Qual	50 50 50 50 50 50	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50 50 RDL	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000	U U U U U U	50 50 50 50 50 50 8DL	50 50 50 50 50 50 50 10/23/00 Result	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000	U U U U U U	50 50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000	U U U U U U	50 50 50 50 50 50 50 10	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20	U U U U U Qual R13 RL-3,U RL-3	50 50 50 50 50 50 80 RDL	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000	U U U U U U Qual	50 50 50 50 50 50 50 RDL	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50 50 RDL	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	50 50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000	U U U U U U	50 50 50 50 50 50 RDL	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000	U U U U U U Qual	50 50 50 50 50 50 70 8DL	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13.000	U U U U U U	50 50 50 50 50 50 50 RDL
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 2.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 10 8.0	U U U U U U	50 50 50 50 50 50 50 8DL	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 5.6 230	U U U U U Qual R13 RL-3,U RL-3	50 50 50 50 50 50 8DL 20 4.0	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 10	U U U U U U Qual	50 50 50 50 50 50 8DL 10 10	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50 50 RDL	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	50 50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000	U U U U U U	50 50 50 50 50 50 RDL 10 2.0	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000	U U U U U U	50 50 50 50 50 50 50 10 10 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 10 5.1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 10 2.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 10 8.0	U U U U U U	50 50 50 50 50 50 8DL 10 2.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230	U U U U U U Qual R13 RL-3,U RL-3	50 50 50 50 50 50 8DL 20 4.0 2.0	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 10 4.0	U U U U U U Qual	50 50 50 50 50 50 8DL 10 10 2.0	50 U 50 U 50 U 50 U 50 U 50 U 50 U 10/23/00 Result Qual mg/kg 11.000 4.2 1.200	50 50 50 50 50 50 70 8DL 10 10 2.0	50 L 50 L 50 L 50 L 50 L 50 L 50 L 60 L 60 L 60 L 60 L 60 L 60 L 60 L 6	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	50 50 50 50 50 50 50 10/23/00 Result img/kg 11,000 2.9 110	U U U U U U V	50 50 50 50 50 50 70 8DL 10 10 2.0	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10 5.5	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 RDL	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6	U U U U U U Qual	50 50 50 50 50 50 50 10 10 10 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 2.0 1.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 8.0 100	U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 1.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230	U U U U U U Qual RI3 RL-3,U RL-3 RL-3,U RL-3,U	50 50 50 50 50 50 8DL 20 4.0 2.0	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 10 4.0	U U U U U U Qual	50 50 50 50 50 50 RDL 10 2.0 1.0	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50 70 8DL 10 10 2.0 1.0	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 50	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 2.9 110 0.50	U U U U U U V	50 50 50 50 50 70 8DL 10 2.0 1.0	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 5.5 540	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 10 2.0 1.0	50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140	U U U U U U Qual	50 50 50 50 50 50 50 RDL 10 10 2.0 1.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barrum Beryllium Cadmium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 0.58	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 10 10 2 0 1 0 50 50	50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 10 8.0 100 6.59	U U U U U U	50 50 50 50 50 50 RDL 10 2.0 1.0 0.50 0.50	50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230 1.0	U U U U U Qual RL-3 RL-3.U RL-3, Rl-3, Rl-	50 50 50 50 50 50 RDL 20 4.0 2.0 1.0	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 4.0 1,300 0.50	U U U U U U Qual	50 50 50 50 50 50 RDL 10 2.0 1.0	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50 8DL 10 2.0 1.0 0.50	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 56 J 56	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 2.9 110 0.50 0.66	U U U U U U V	50 50 50 50 50 50 RDL 10 2.0 1.0 0.50	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10 5.5 540	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 2.0 1.0 0.50	50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50	U U U U U U Qual	50 50 50 50 50 50 50 RDL 10 10 2.0 1.0 0.50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barrum Beryllium Cadmium Calcium	50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 0.58 0.50 6,100	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 8DL 10 2.0 0.50 0.50	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 100 8.0 100 5.59	U U U U U U U U U U U U U U	50 50 50 50 50 50 RDL 10 2.0 1.0 0.50 0.50	50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230 1.0	U U U U U Qual RI3 RL-3.U RL-3,U RL-3,U RL-3,RL-3	50 50 50 50 50 50 RDL 20 4.0 2.0 1.0	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 4.0 1,300 0.50	U U U U U U Qual	50 50 50 50 50 50 RDL 10 2.0 1.0	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	50 50 50 50 50 8DL 10 2.0 1.0 0.50	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 56(J) 56(J) 56(J) 56(J) 56(J) 56(J) 56(J) 56(J) 56(J) 56(J) 56(J) 56(J) 66(J)	50 50 50 50 50 50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 10 2.9 110 0.50 0.666 7,600 19	U U U U U U V	50 50 50 50 50 RDL 10 2.0 0.50 0.50	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10 5.5 540	U U U U U U Qual	50 50 50 50 50 50 70 8DL 10 2.0 1.0 0.50 0.50	50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50	U U U U U U Qual	50 50 50 50 50 50 50 RDL 10 10 2.0 1.0 0.50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium	50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 0.58 0.50 6,100	U	50 50 50 50 50 50 8DL 10 10 2 0 0.50 0.50 15 1.0	50 50 50 50 50 50 50 10/1k/00 Result mg/kg 17,000 10 8.0 100 0.59 0.65 16,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 RDL 10 2.0 1.0 0.50 0.50	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230 1.0 3,400	U U U U U Qual RL-3.U RL-3.U RL-3.B RL-3.U RL-3.U RL-3.U RL-3.B RL-3.U RL-3.R	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 1,300 0.50 1.11 24,000	U U U U U U Qual	50 50 50 50 50 50 RDL 10 2.0 1.0	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	500 500 500 500 500 100 1.00 0.500 1.00	50 L 50 L 50 L 50 L 50 L 50 L 50 L 10/23/00 Result Qu mg/kg 15,000 10 L 4.4 220 0.50 L 0.50 L	J 560 J 560 J 500 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U V	50 50 50 50 50 8DL 10 2.0 1.0 0.50 0.50 1.5	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 5.5 540 0.52 9.67 8,400	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 2.0 1.0 0.50 0.50	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50 0.51 11,000	U U U U U U Qual	50 50 50 50 50 50 50 RDL 10 10 2.0 1.0 0.50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobali	50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 6.58 0.58 0.50 6,100	U	50 50 50 50 50 50 8DL 10 10 2.0 0.50 0.50 15 1.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 10 8.0 100 0.59 0.65 16,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 2.0 0.50 0.50 1.0	50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230 1.0 3,400	U U U U U U Qual RL-3.U RL-3.U RL-3.U RL-3.RL-3.RL-3.RL-3.RL-3.RL-3.RL-3.RL-3.	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 1,300 0.50 1.1 24,000 20	U U U U U U Qual	50 50 50 50 50 50 8DL 10 10 20 0.50 0.50 15 1.0 1.0	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	500 500 500 500 500 100 100 100 1.00 0.500 1.00 1.	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 560 J	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 10 2.9 110 0.50 9.66 7,660	U U U U U U V	50 50 50 50 50 50 70 10 10 2.0 0.50 0.50 1.0	50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 5.5 540 0.52 0.67 8,400 27	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 2.0 1.0 0.50 0.50 15 1.0	50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 0.50 0.51 11,000 22 6.1	U U U U U U Qual	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 15 1.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 6,50 6,100 32 24,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 0.50 0.50 15 1.0 10	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 10 8.0 100 0.59 0.65 16,000	U U U U U U Qual	50 50 50 50 50 50 8DL 10 2.0 1.0, 0.50 0.50 1.0 1.0	50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 5.6 230 1.0 3,400 39 13	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0 2.0	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 4.0 1,300 0.50 1.1 24,000 20 5.5	U U U U U U Qual	50 50 50 50 50 50 8DL 10 10 2.0 0.50 0.50 15 1.0 1.0 5.0	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 560 J 560 J 560 J 560 J 560 J 560 J 560 J 100 J 100	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 10 2.9 110 0.50 0.66 7.600 19 8.5 18,000	U U U U U U V	500 500 500 500 500 500 700 700 700 700	50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 5.5 540 0.52 0.67 8,400 27	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 70 8DL 10 10 0.50 0.50 15 1.0	50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50 0.51 11,000 22 6.1	U U U U U U Qual	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 15 1.0 1.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 0.58 0.59 6,100 32 4,000 15 15 15 15 15 15 16 16 17 18 18 18 18 18 18 18 18 18 18	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 500 500	50 50 50 50 50 50 50 10/1k/00 Result mg/kg 17,000 10 8.0 100 0.59 0.65 16,000 22,000 380	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 2.0 1.0 0.50 0.50 1.0 1.0 2.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 5.6 230 1.0 3,400 39 13	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8RDL 200 4.0 2.0 1.0 300 2.0 2.0 4.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 4.0 1,300 0.50 1.1 24,000 20 5.5 15,000	U U U U U U Qual	500 500 500 500 500 8DL 100 100 100 100 100 100 100 10	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	566 500 500 500 500 8RDL 100 1.00 0.500 1.00 1.00 1.00 1.00 1.00	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 560 J 550 J 550 J 550 J 560 J 560 J 560 J 560 J 560 J 560 J 600 J 700 J	50 50 50 50 50 50 50 10/23/00 Result img/kg 11,000 10 2.9 110 0.50 0.66 7,600 19 8.5 18,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8DL 100 100 1.00 1.00 1.00 1.00 1.00 1.00	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10 5.5 540 0.52 0.67 8,400 27 9.0 22,000 320 320	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 1.0 1.0 5.0 2.0	50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50 0.51 11,000 22 6.1 16,000 7.5 6,100	U U U U U U Qual	50 50 50 50 50 50 8DL 10 2.0 1.0 0.50 0.50 1.5 1.0 1.0 2.0 2.0 2.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobali Iron Lead Magnesium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 0.58 0.50 6,100 322 15 24,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 100	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 100 8.0 100 0.59 0.65 16,000 28 11 11 22,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 10 20 1.0 0.50 1.0 1.0 1.0 1.0 2.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 5.6 230 1.0 3,400 39 13 31,000	U U U U U U U U U U U U U U U U U U U	\$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 10 4.0 0.50 1.1 24,000 20 5.5 15,000 48	U U U U U Qual	500 500 500 500 500 8DL 100 1.00 0.500 0.500 1.00	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	566 500 500 500 500 8RDL 100 2.00 1.00 0.500 1.10 1.00 1.00 1.00 1.00	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 560 J 560 J 560 J 560 J 560 J 560 J 560 J 560 J 560 J 600 J 100 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 8DL 100 100 0.500 1.00 1.00 1.00 1.00 1.00	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 5.5 540 0.52 0.67 8,400 27 9.0 9.9	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 100 100	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13.000 3.6 140 0.50 0.51 11,000 22 6.1 16,000 7.5 6,100	U U U U U U Qual	50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 6
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Anumony Arsenic Barrum Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 6,100 32 15 24,000 12 11,000 10 10 11,000 11,000 12 11,000 10 10 10 10 10 10 10 10 10	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 100 100 0.500 1.00 1.	50 50 50 50 50 50 50 10718/00 Result mg/kg 17,000 0.59 0.65 16,000 28 11 22,000 10 9,300 0.21	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 60 10 10 2.0 0.50 1.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230 1.0 3,400 39 13 31,000 10 8,200 620 60,085 28	U U U U U U U U U U U U U U U U U U U	\$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 1,300 0,50 1,1 24,000 20 5.5 15,000 48 4,400 270 0,020 17	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 8DL 100 1.00 1	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J S60 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 100 1.00 0.500 1.00 5.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1	50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 0.52 0.67 8,400 27 9.0 22,000 9.9 8,100 0.084	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 0.500 1.00 1.	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50 0.51 11,000 22 6.1 16,000 7.5 6,100 220 0.055	U U U U U U Qual	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 6,100 32 24,000 12 11,000 510 510 511 511 511 512 513 513 514 514 515 515 517 517 518 518 518 518 518 518 518 518	U	50 50 50 50 50 50 50 10 10 20 0.50 15 1.0 1.0 10 10 0.50 15 10 10 10 10 10 10 10 10 10 10 10 10 10	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 0.59 0.65 16,000 28 11 22,000 10 9,300 380 0.21 21	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 10 2.0 0.50 0.50 1.0 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 1.0 1.0 3,400 39 13 31,000 10 8,200 620 620 620 620 620 620 620	U U U U U U U U U U U U U U U U U U U	\$00 500 500 500 500 500 500 500 500 500	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 1,300 0.50 1.1 24,000 20 5.5 15,000 48 4,400 270 0.020	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 RDL 100 1.00 0.500 1.00 1	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	500 500 500 500 500 500 100 100 100 100	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J S60 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 RDL 100 2.00 0.500 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10 5.5 540 0.52 0.67 8,400 27 9.0 22,000 9.9 8,100 320 0.084 23	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 0.500 1.00 1.	50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50 0.51 11,000 22 6.1 16,000 7.5 6,100 220 0.055 14	U U U U U U Qual	50 50 50 50 50 50 50 10 10 2.0 1.0 0.50 1.0 1.0 5.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Chromium Chromium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 6,100 32 15 24,000 11,000 510 32 33 31 31 31 31 31 31	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 10 0.50 0.50 15 10 10 10 10 10 10 10 10 10 10	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 0.59 0.65 16,000 10 9,300 380 0.21 21 2.00	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 0.50 0.50 15 10 10 0.50 10 10 0.50 10 10 10 10 10 10 10 10 10 1	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 1.0 3,400 1.0 3,400 10 8,200 620 0.085 28 4.0 600	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	\$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00	50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 0.50 1.1 24,000 20 5.5 15,000 48 4,400 270 0.020 177 2.0 410	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 100	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	500 500 500 500 500 500 100 100	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	J S60 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 1.00 0.500 1.00 5.00 1.00 1	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10 5.5 540 0.52 0.67 8,400 27 9.0 22,000 9.9 8,100 320 0.084 23 2.0 540	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 6	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50 0.51 11,000 7.5 6,100 222 6.1 16,000 7.5 6,100 225 6,100 247 6,100 6,	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobali Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium Thallium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 0.58 0.50 6,100 12 11,000 510 0.083 32 24,000 510 0.083	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 6	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 8.0 100 0.59 0.65 16,000 10 28 11 22,000 380 0.21 21 20 2,500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 100	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 1.0 3,400 3,400 10 8,200 620 0.085 24 4.0 600 20	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	\$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 1.309 0.50 1.11 24,000 20 5.5 15,000 48 4,400 270 0.020 17 2.0 410	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	500 500 500 500 500 500 100 100	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 560 J 560 J 560 J 560 J 560 J 560 J 560 J 600 J 100 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 0.500 1.00 0.500 1.00 0.000 1.00 0.000 1.00 0.000 1.00 0.000 1.00 0.000 1.0000 1.0000 1.000 1.000 1.000 1.000 1.000 1.0000	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 5.5 540 0.52 0.67 8,400 27 9.0 22,000 9.9 8,100 320 0.084 23 20 540 10 10 10 10 10 10 10 10 10 1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 10 10 10 0.50 15 10 10 10 10 10 10 10 10 10 10	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 0.50 0.51 11,000 22 6.1 16,000 7.5 6,100 220 0.055 14 2 0 4 70 10	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 15 1.0 1.0 2.0 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barrum Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium Thallium Vanadium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 0.58 0.50 6,100 32 15 24,000 510 0.90 511,000 510 0.083 31 2.50 0.083 31 2.50 0	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 10 10 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 50 50 50 50 50 50 10/1k/00 Result mg/kg 17,000 100 0.59 0.65 16,000 28 11 22,000 380 0.21 21 20 2,500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 100	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230 1.0 3,400 39 13 31,000 620 0.085 28 4.0 600 600	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	\$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 1.300 0.50 1.11 24,000 20 5.5 15,000 48 4,400 270 0.020 17 2.0 410 10 10 10 10 10 10 10 10 10	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 100	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	500 500 500 500 500 100 100 0.500 150 100 100 100 100 100 100	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J S60 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 1.00 0.500 1.00 1.	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 10 5.5 540 0.52 0.67 8,400 27 9,0 22,000 320 0.084 23 2.0 540 10 10 10 10 10 10 10 10 10 1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 10 10 0.50 0.50 15 1.0 1.0 0.20 1.0 0.20 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 10 3.6 140 0.50 0.51 11,000 22 6.1 16,000 7.5 6,100 200 0.055 14 20 10 10 10 10 10 10 10 10 10 1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 10 10 10 2.0 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium Thallium	50 50 50 50 50 50 50 10/17/00 Result mg/kg 21,000 5.1 200 0.58 0.50 6,100 12 11,000 510 0.083 32 24,000 510 0.083	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 6	50 50 50 50 50 50 50 10/18/00 Result mg/kg 17,000 8.0 100 0.59 0.65 16,000 10 9,300 380 0.21 21 20 2,500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 100 100 100	50 50 50 50 50 50 50 10/18/00 Result mg/kg 26,000 20 5.6 230 1.0 3,400 39 13 31,000 620 0.085 28 4.0 600 600	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	\$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00	50 50 50 50 50 50 50 10/23/00 Result mg/kg 11,000 1.309 0.50 1.11 24,000 20 5.5 15,000 48 4,400 270 0.020 17 2.0 410	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 10 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 U 50 U 50 U 50 U 50 U 50 U 50 U 50 U	500 500 500 500 500 500 100 100	50 L 50 L 50 L 50 L 50 L 50 L 50 L 50 L	J 560 J 560 J 560 J 560 J 560 J 560 J 560 J 600 J 100 J	50 50 50 50 50 50 50 50 50 50 50 50 50 5	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 100 0.500 1.00 0.500 1.00 0.000 1.00 0.000 1.00 0.000 1.00 0.000 1.00 0.000 1.0000 1.0000 1.000 1.000 1.000 1.000 1.000 1.0000	50 50 50 50 50 50 50 10/23/00 Result mg/kg 16,000 5.5 540 0.52 0.67 8,400 27 9.0 22,000 9.9 8,100 320 0.084 23 20 540 10 10 10 10 10 10 10 10 10 1	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 10 10 10 0.50 15 10 10 10 10 10 10 10 10 10 10	50 50 50 50 50 50 50 10/26/00 Result mg/kg 13,000 0.50 0.51 11,000 22 6.1 16,000 7.5 6,100 220 0.055 14 2 0 4 70 10	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 10 10 2.0 1.0 0.50 15 1.0 1.0 2.0 1.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1

Notes: A-01 = Sample used for MS/MSNotes: A-01 = Sample used for MS/MSD was subcontracted to Del Mar Analytical, Colton Laboratory. Therefore MS/MSD results were not reported.

- C1 = Calibration Verification reco C1 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 131
- RL-1 = Reporting limit raised due RL-1 = Reporting limit raised due to sample matrix interference.
- RL-3 = Reporting limit raised due RL-3 = Reporting limit raised due to high concentrations of non-target analytes.
- U = Constituent not detected abov U = Constituent not detected above laboratory's reporting limits.



Subsurface Supplemental Investigation Table 4.2F

Polychlorinated Biphenyls, Pesticides and Metals Concentrations in Indoor Direct Push Borings Waste Disposal, Inc. Superfund Site

																,													Page	
Sample Location	Parcel 24	<u> </u>	↓	Parcel 24			Parcel 22	İ	L	Parcel 22			Parcel 22	<u> </u>		Parcel 22	l ,		Parcel 24	l	<u> </u>	Parcel 24		<u> </u>	Parcel 24	<u> </u>	ــــــ	Parcel 24		
Sample Number	WDI-SB-ID	DP-10-11	<u> </u>	WDI-SB-II	DP-10-20	0	WDI-SB-II	OP-12-5	<u> </u>	WDI-SB-IDF	-12-15		WDI-SB-II	DP-13-10	<u> </u>	WDI-SB-ID	P-13-20	ļ	WDI-SB-ID	P-14-5		WDI-SB-ID	DP-14-10		WDI-SB-I	DPFD-14-10		WDI-SB-IDP	-14-20	
Sample Type	Waste			Native	<u> </u>		Native		ļ	Native			Waste			Native		L	Waste		L	Waste		1	Waste		ļ	Native		
Sample Depth	11	<u> </u>	<u>. </u>	20)	1	5	1	<u> </u>	15			13	L	└	20		L	14		ļ	10	L		10	0		20		
Sample Date	10/13/00		L	10/13/00	1	1	10/13/00	1	<u> </u>	10/13/00			10/13/00	<u> </u>		10/13/00	<u></u>	<u> </u>	10/14/00			10/14/00	<u> </u>	1	10/14/00	<u></u>		10/14/00		
Laboratory	Del Mar Ar	nalytical	L	Del Mar A	nalytical		Del Mar Aı	nalytical	L	Del Mar Ana	lytical		Del Mar A	alytical	<u> </u>	Del Mar Ar	alytical	ļ	Del Mar Ar	nalytical	<u> </u>	Del Mar An	alytical		Del Mar A			Del Mar Anal	lytical	
Lab Sample ID	1JJ0523-04			1JJ0523-05	<u> </u>	<u> </u>	1JJ0523-06	ļ	<u> </u>	1JJ0523-07			1,1,10523-08		<u> </u>	IJJ0523-09		ļ	1330531-01			IJJ0531-02		ļ	1JJ0531-03			1JJ0531-04		
Analysis Date	10/20/00		L	10/19/00)		10/19/00		L	10/19/00			10/20/00	L		10/20/00		L_	10/19/00		L	10/19/00			10/19/00	0		10/20/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result (Qual I	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result C	Qual 1	RDL :
	ug/kg		<u> </u>	ug/kg	<u>i</u>	1	ug/kg			ug/kg			ug/kg		<u> </u>	ug/kg			ug/kg			ug∕kg		<u> </u>	ug/kg		1	ug/kg		
4,4'-DDD	250	RL-1,C1,U	250	5.0	υ	5.0	5.0	υ	5.0	5.0	υ	5.0	250	RL -1,C1,U	250	5.0	υ	5.0	50	RL-1,C1,U	50	250	RL-1,C1,U	250	50	RL-1,C1,U	50	5.0	U	5.0
4.4'-DDE	250	RL-1,U	250	5.0	υ	5.0	5.0	U	5.0	5.0	υ	5.0	250	RL-1,U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
4,4'-DDT	250	RL-1,C2,U	250	5.0) U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1.C2,U	250	5.0	υ	5.0	50	RL-1,C2,U	50	250	RL-1,C2,U	250	50	RL-1,C2,U	50	5.0	U	5.0
Aldrin	250	RL-1,U	250	5.0) U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1.U	250	5.0	υ	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1.U	50	5.0	U	5.0
alpha-BHC	250	RL-1,U	250	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1.U	250	5.0	υ	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
beta-BHC	250	RL-1,U	250	5.0) U	5.0	5.0	υ	5.0	5.0	U	5.0	250	RL-1.U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
Chlordane	2,500	RL-1,U	2,500	50	υ	50	50	U	50	50	U	50	2,500	RL-1,U	2,500	50	U	50	500	RL-1,U	500	2,500	RL-1,U	2,500	500	RL-1,U	500	50	υ	50
delta-BHC	500	RL-1,U	500	10) U	10	10	U	10	10	U	10	500	RL-1.U	500	10	U	10	100	RL-1,U	100	500	RL-1,U	500	100	RL-1.U	100	10	υ	10
Dieldrin	250	RL-1,U	250	5.0) U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1,U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	υ	5.0
Endosulfan I	250	RL-1,U	250	5.0	U	5.0	5.0	υ	5.0	5.0	υ	5.0	250	RL-1.U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	υ	5.0
Endosulfan II	250	RL-1,U	250	5.0	υ	5.0	5.0	U	5.0	5.0	υ	5.0	250	RL-1,U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
Endosulfan sulfate	500	RL-1,U	500	10	υ	10	10	U	10	10	U	10	500	RL-1,U	500	10	U	10	100	RL-I,U	100	500	RL-1,U	500	100	RL-1,U	100	10	U	10
Endrin	250	RL-I,U	250	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1.U	250	5.0	U	5,0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
Endrin aldehyde	250	RL-1,U	250	5.0) U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1,U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
Endrin ketone	250	RL-1,C2,U	250	5.0) U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1,C2,U	250	5.0	Ų	5.0	50	RL-1.C2,U	50	250	RL-1,C2,U	250	50	RL-1.C2,U	50	5.0	U	5.0
gamma-BHC (Lindane)	250	RL-1,U	250	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1,U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
Heptachlor	250	RL-1,U	250	5.0) U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1.U	250	5.0	U	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
Heptachlor epoxide	250	RL-1,U	250	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	250	RL-1,U	250	5.0	υ	5.0	50	RL-1,U	50	250	RL-1,U	250	50	RL-1,U	50	5.0	U	5.0
Methoxychlor	250	RL-1,C2,U	250	5.0	U	5.0	5.0	υ	5.0	5.0	υ	5.0	250	RL-1.C2,U	250	5.0	U	5.0	50	RL-1,C2,U	50	250	RL-1,C2,U	250	50	RL-1,C2,U	50	5.0	U	5.0
Toxaphene	10,000	RL-1,U	10,000	200	U	200	200	U	200	200	U	200	10,000	RL-1,U	10,000	200	U	200	2,000	RL-1,U	2,000	10,000	RL-1,U	10,000	2,000	RL-1,U	2,000	200	Ü	200
Analysis Date	10/21/00			10/21/00			10/21/00			10/21/00			10/21/00			10/21/00			10/21/00			10/21/00			10/21/00	ol .		10/21/00		
	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result C	Jual F	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result	Qual	RDL	Result Q	ual F	RDL.
																Result	Quai	INDL	I KCSUII	Quui										
I	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg	3		ug/kg	Quai	KDL	ug/kg	Quai		ug/kg	- 422	L	ug/kg	1	1	ug/kg		
Aroclor 1016	ug/kg 250	RL-3.U	250	ug/kg 50) U	50	ug/kg 50		50		υ	50	ug/kg 250		250			50	ug/kg		250			100	ug/kg 50	U	50	ug/kg 50	υ	50
Aroclor 1016 Aroclor 1221		RL-3,U RL-3,U	250 250		+	50		U	50 50	ug/kg		50 50				ug/kg	U		ug/kg	RL-3,U		ug/kg	RL-3,U	100			50		υ	50 50
	250	RL-3,U		50	U	50 50 50	50	U U	50 50 50	ug/kg 50	υ	50 50 50	250	RL-3,U RL-3,U	250	ug/kg 50	U	50	ug/kg 250 250	RL-3,U RL-3,U	250	ug/kg 100	RL-3,U	+	50	U	50 50 50	50		-
Aroclor 1221	250 250	RL-3,U RL-3,U	250	50 50	U U	50	50 50	U U	50	ug/kg 50 50	U U	50	250 250	RL-3,U RL-3,U	250 250	ug/kg 50 50	υ υ υ	50 50	ug/kg) 250) 250) 250	RL-3,U RL-3,U RL-3,U	250 250	ug/kg 100 100	RL-3,U RL-3,U	100	50 50) U U U U	50 50 50 50	50 50	U	-
Aroclor 1221 Aroclor 1232	250 250 250	RL-3,U RL-3,U RL-3,U	250 250	50 50 50	U U U	50	50 50 50	บ บ บ	50 50	50 50 50	U U	50 50	250 250 250	RL-3,U RL-3,U RL-3,U	250 250 250	ug/kg 50 50 50	υ υ υ	50 50 50	ug/kg 0 250 250 0 250 0 250 250	RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250	ug/kg 100 100 100	RL-3,U RL-3,U RL-3,U	100	50 50 50) U U U U		50 50 50 50	U	-
Aroclor 1221 Aroclor 1232 Aroclor 1242	250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250	50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50	50 50 50 50	บ บ บ บ	50 50 50	50 50 50 50	υ υ υ	50 50 50	250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250	ug/kg 50 50 50 50	υ υ υ	50 50 50 50	ug/kg 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250	ug/kg 100 100 100 100	RL-3,U RL-3,U RL-3,U RL-3,U	100 100 100	50 50 50 50 50	U U U U U	50	50 50 50 50 50	υ υ υ	50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248	250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250	50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50	50 50 50 50 50	υ υ υ υ	50 50 50	50 50 50 50 50 50	U U U U U U U U	50 50 50 50	250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250	50 50 50 50 50 50	υ υ υ υ	50 50 50 50 50	ug/kg 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250	100 100 100 100 100	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	100 100 100 100	50 50 50 50 50	0 U U U U U U U U U U	50	50 50 50 50 50	υ υ υ	50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254	250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250	50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50	50 50 50 50 50 50	υ υ υ υ υ	50 50 50 50 50	50 50 50 50 50 50 50 50 50 50	U U U U U U U U	50 50 50 50	250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	50 50 50 50 50 50	υ υ υ υ	50 50 50 50 50 50	ug/kg 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	100 100 100 100 100 100	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	100 100 100 100 100	50 50 50 50 50 50	0 U U U U U U U U U U U U U U U	50	50 50 50 50 50 50	υ υ υ υ	50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250	50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50	50 50 50 50 50 50 50	U U U U U U	50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 50 10/26/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50	250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	50 50 50 50 50 50 50 50 10/26/00	υ υ υ υ υ	50 50 50 50 50 50	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	ug/kg 100 100 100 100 100 100 100 100 10/25/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	100 100 100 100 100	50 50 50 50 50 50 50	0 U U U U U U U U U U U U U U U	50	50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	250 250 250 250 250 250 250 250 10/26/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	50 50 50 50 50 50 50 10/26/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50	50 50 50 50 50 50 50 10/26/00	U U U U U U	50 50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 50 10/26/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50	250 250 250 250 250 250 250 250 10/26/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	50 50 50 50 50 50 50 50 10/26/00	υ υ υ υ υ	500 500 500 500 500 500	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250	ug/kg 100 100 100 100 100 100 100 100 10/25/00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	100 100 100 100 100	50 50 50 50 50 50 50 10/25/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50	50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	250 250 250 250 250 250 250 250 10/26/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	50 50 50 50 50 50 50 10/26/00 Result	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 RDL	50 50 50 50 50 50 50 50 10/26/00 Result	U U U U U U U	50 50 50 50 50 50	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50	250 250 250 250 250 250 250 250 10/26/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250	50 50 50 50 50 50 50 50 10/26/00 Result	U U U U U U	500 500 500 500 500 500	ug/kg 250 250 250 250 250 250 250 10/25/00 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250	ug/kg 100 100 100 100 100 100 100 100 100 Result	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	100 100 100 100 100	50 50 50 50 50 50 50 10/25/00 Result	U U U U U U U	50 50 50 50	50 50 50 50 50 50 50 50 10/26/00 Result Q	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3	250 250 250 250 250 250 250 250 250 20	50 50 50 50 50 50 50 10/26/00 Result mg/kg	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 8DL	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000	U U U U U U U Qual	50 50 50 50 50 50 8DL 20	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 15,000 20 F	U U U U U U U U U U U U U RL-3 RL-3,U	50 50 50 50 50 50 8DL 20	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 250 20	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U Qual RL-3 RL-3,U	50 50 50 50 50 50 50 RDL	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 RDL	ug/kg 100 100 100 100 100 100 100 10/25/00 Result mg/kg	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	100 100 100 100 100 100	50 50 50 50 50 50 50 10/25/00 Result	U U U U U U U	50 50 50 50 50 RDL	50 50 50 50 50 50 50 50 10/26/00 Result Q	U U U U U U U C C C C C C C C C C C C C	50 50 50 50 50 50 50 20
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3 RL-3	250 250 250 250 250 250 250 250 20 4.0	50 50 50 50 50 50 50 10/26/00 Result mg/kg 29.000 7.6	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 70 8DL 20 20 4.0	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 20	U U U U U U U Qual RL-3.U RL-3.U	50 50 50 50 50 50 8DL 20 4.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 10/26/00 Result Cmg/kg 15,000 20 F 6.9	U U U U U U U U U U U U U RL-3 RL-3,U RL-3	50 50 50 50 50 50 8DL 20 4.0	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 250 20 4.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U C U U C U	50 50 50 50 50 50 50 8DL 20 4.0	ug/kg 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	250 250 250 250 250 250 250 250 RDL 10 10	ug/kg 100 100 100 100 100 100 100 100 100 Result mg/kg 7,300	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	100 100 100 100 100 100	50 50 50 50 50 50 50 10/25/00 Result mg kg	U U U U U U U Qual	50 50 50 50 8DL 10 10	50 50 50 50 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 8DL 20 20 4.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3 RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 250 20	50 50 50 50 50 50 10/26/00 Result mg/kg 29,000 20 7.6	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 RDL 20 20 4.0	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2	U U U U U U Qual RL-3.U RL-3.RL-3.U	50 50 50 50 50 50 8DL 20	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result Cmg/kg 15,000 6.9 130	U U U U U U U U U U U U U U U RL-3 RL-3,U RL-3	50 50 50 50 50 50 8DL 20	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 250 20	ug/kg 50 50 50 50 50 50 50 50 50 50 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8DL	ug/kg 250 250 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 250 250 250 250 250 250 250 10 10	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	100 100 100 100 100 100 RDL 10	50 50 50 50 50 50 50 10/25/00 Result mg/kg 8,900	U U U U U U U U U Qual	50 50 50 50 RDL 10 10 2.0	50 50 50 50 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U C C C C C C C C C C C	50 50 50 50 50 50 50 20
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 20 4 0 2.0 1.0	500 500 500 500 500 500 500 500 500 500	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 RDL 20 20 4.0	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190	U U U U U U U Qual RL-3.U RL-3.RL-3.RL-3.U	50 50 50 50 50 50 8DL 20 4.0	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result 0 mg/kg 15,000 6.9 130 1.0 F	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0,	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3 RL-3 RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 20 4.0 2.0	ug/kg 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U Qual RL-3, RL-3, RL-3, RL-3, RL-3, U	50 50 50 50 50 50 50 8DL 20 4.0	ug/kg 250 250 250 250 250 250 250 250 250 250	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 250 250 250 250 250 250 250 10 10 2.0 1.0	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual	100 100 100 100 100 100 RDL 10	50 50 50 50 50 50 50 10/25/00 Result mg kg 8,900	U U U U U U U U Qual	50 50 50 50 RDL 10 10 2.0 1.0	50 50 50 50 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 20 4 0 2.0 1.0	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8DL 200 200 200 200 100 100 100 100 100 100	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 20 4.2 190	U U U U U U U Qual RL-3.U RL-3.B RL-3.U RL-3.U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20 4.0 239	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 20 20 4.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 60 60 60 10/26/00 Result mg/kg 28,000 230 1.0	U U U U U U U U U U U U U U U C U C U C	500 500 500 500 500 500 8DL 200 4.00	ug/kg 250 250 250 250 250 250 250 250 250 260 260 10/25/00 Result mg/kg 16,000 6.11 340 0.50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 250 250 250 250 250 250 250 250 250	ug/kg 100 100 100 100 100 100 100 100 10/25/00 Result mg/kg 7,300 11 810 0.50	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	100 100 100 100 100 100 RDL 10 2.0 1.0	50 50 50 50 50 50 50 10/25/00 Result mg/kg 8,900 10	U U U U U U U U U U U U U U U U U U U	50 50 50 50 8DL 10 10 2.0 1.0 0.50 0.50	50 50 50 50 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 20 4.0 2.0 1.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 1.0 1.0	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 20 40 20 1.0 30	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 20 4.0 2.0 1.0 30	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 1.0	U U U U U U U Qual RL-3.U RL-3.U RL-3.RL-3.U RL-3.U RL-3.U	50 50 50 50 50 50 8DL 20 20 4.0 1.0 30	ug/kg 50 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 15,000 20 F 6.9 130 F 1.0 F 1.0 F 8,200	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 20 4.0 2.0, 1.0 30	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20 4.0 230 1.0	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3 RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 20 4.0 2.0	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 230 1.0 1.0 11,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8DL 200 4.0 2.0 1.0	ug/kg 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.550 1.2	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 250 250 250 250 250 250 250 250 250	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	100 100 100 100 100 100 RDL 10 10 2.0 1.0	50 50 50 50 50 50 50 10/25/00 Result mg kg 8,900 10 11 1,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 8DL 100 100 1.00 0.500 0.500	50 50 50 50 50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 430 1.00 1.00	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 20 20 4 0 2.0 1.0 30 2.0	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 1.0 30 2.0	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600	U U U U U U U Qual RL-3.U RL-3.U RL-3.RL-3.U RL-3.JU RL-3.JU RL-3.JU	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0	ug/kg 50 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 15,000 20 F 6.9 130 F 1.0 F 8,200 23	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 20 4.0 2.0 1.0 30 2.0	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 230 1.0 1.0 7,300	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 20 4.0 2.0 1.0 30	ug/kg 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 230 1.0 11,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 8DL 200 4.00 2.00 1.00 300 2.00	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 10 10 0.50 0.50 0.50	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 100 RDL 10 2.0 1.0 0.50 0.50	50 50 50 50 50 50 50 10/25/00 Result mg kg 8,900 11 1,000 0.50 1.2 18,000	U U U U U U Qual	500 500 500 500 750 8DL 100 1.00 1.00 0.50 0.50 15	50 50 50 50 50 50 50 10/26/00 Result Q mg/kg 16,000 20 R 40 R 98 1.0 R 50 10/26/00	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.30 1.0 1.5,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 20 4.0 2.0 1.0 3.0 2.0 2.0 2.0	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 8DL 200 200 1.00 1.00 300 2.00 2.00 2.00	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0 2.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 10/26/00 Result Cmg/kg 15,000 1.0 F 6.9 1.0 F 8,200 23 7.5	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 20 20 4.0 1.0 1.0 30 2.0 2.0	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20 4.0 239 1.0 7,300	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 250 20 20 4.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 8DL 200 4.00 2.00 1.00 300 2.00	ug/kg 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 10 10 2.0 1.0 0.50 1.5	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 RDL. 10 2.0 1.0 0.50 0.50 1.5	50 50 50 50 50 50 10/25/00 Result mg kg 8,900 11 1,000 0.50 1.22 18,000	U U U U U U U Qual	500 500 500 8DL 100 100 2.00 0.500 0.500 150 1.00	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.30 1.0 1.5,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 20 4 0 2.0 1.0 30 2.0 2.0 1.0	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 8DL 200 200 100 100 100 100 100 100	50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 11	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 200 200 1.00 300 2.00 2.00 100	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result Cmg/kg 15,000 1.0 F 6.9 1.0 F 8,200 23 7,5 24,000	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 20 20 4.0 1.0 1.0 30 2.0 1.0	250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 4.0 230 1.0 7,300 32	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 20 4.0 2.0 1.0 30 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 8DL 20 20 4.0 1.0 30 2.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	ug/kg 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 250	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.5 1.0	50 50 50 50 50 50 10/25/00 Result mg/kg 8,900 11 1,000 0,50 1,2 18,000 19 3,8 13,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 8DL 100 100 2.00 0.500 0.500 150 1.00 5.00	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Aluminum Astrimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 1.0 15,000 15,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U R R-1,U R R-1,U R-1,U R-1,U R-1,U R-1,U R-1,U R-1,U R-1,U R-	250 250 250 250 250 250 250 20 4.0 1.0 3.0 2.0 2.0 2.0 4.0	500 500 500 500 500 500 500 500 500 500	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 8DL 200 200 200 1.00 1.00 2.00 2.00 2.00 4.0	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 11 30,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 8RDL 200 4.00 2.00 1.00 300 2.00 2.00 1.00 4.00 4.00 4.00 4.00 4.00 4.00 4	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result Gright	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 20 1.0 1.0 2.0 1.0 2.0 1.0 4.0 4.0	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26.000 4.0 230 1.0 7.300 32 9.5 27,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U	250 250 250 250 250 250 250 20 20 4.0 1.0 30 2.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 60 50 10/26/00 Result mg/kg 28,000 20 8.0 1.0 1.0 11,000 11,000 14 35,000	U U U U U U U U U U U U U U U U U C U C	50 50 50 50 50 50 50 50 8 RDL 20 20 1.0 1.0 30 2.0 2.0 1.0 4.0 2.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5 17,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 20 20 20 10 0.50 0.50 1.0 1.0 0.50 0.50 1.0 0.50 0.5	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 RDL. 10 2.0 1.0 0.50 0.50 1.5	50 50 50 50 50 50 50 10/25/00 Result mg kg 8,900 11 1,000 0,50 1,2 18,000 19 3,8 13,000 250	U U U U U U U U U U U U U U U U U U U	500 500 500 500 100 100 2.00 0.500 0.500 15 1.00 5.00 2.00	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Aluminum Astrimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 1.0 15,000 33 10 24,000 29	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U R R-1,U R R-1,U R-1,U R-1,U R-1,U R-1,U R-1,U R-1,U R-1,U R-	250 250 250 250 250 250 250 20 20 1.0 1.0 2.0 2.0 2.0 2.0 4.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	500 500 500 500 500 500 500 500 500 500	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 500 500 500 500 500	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 11 30,000 9.4 7,500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 8RDL 200 2.00 1.00 1.00 2.00 2.00 2.00 2.00	ug/kg 50 50 50 50 50 50 50 50 50 50 50 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 20 20 4.0 1.0 30 2.0 2.0 10 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26.000 4.0 230 1.0 7,300 32 9,5 27,000	RL-3,U RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 30 2.0 1.0	ug/kg 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28.000 20 1.0 1.0 11,000 40 435,0000 12	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8DL 200 200 1.00 300 300 2.00 100 4.00 200 200 200 200 200 200 200 200 200	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5 17,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 10 10 0.50 0.50 1.0 1.0 0.50 0.50 0.5	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.5 1.0	50 50 50 50 50 50 10/25/00 Result mg/kg 8,900 11 1,000 0,50 1,2 18,000 19 3,8 13,000	U U U U U U U U U U U U U U U U U U U	500 500 500 500 8DL 100 100 2.00 0.500 0.500 150 1.00 5.00	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Aluminum Assenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 1.0 15,000 3.3 10 24,000 29 8,400	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,R RL-3	250 250 250 250 250 250 250 20 20 1.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	500 500 500 500 500 500 500 500 500 500	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 500 600 600	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 11 30,000 9.4 7,500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 200 4.00 2.00 1.00 2.00 2.00 4.00 2.00 2.00 2.00 2.00 2	ug/kg 50 50 50 50 50 50 50 10/26/00 Result Cmg/kg 15,000 1.0 F 1.0 F 1.0 F 3,200 24,000 5,7 8,200 410	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 20 20 1.0 1.0 2.0 10 4.0 2.0 2.0 2.0 2.0	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20 4,0 239 1.0 7,300 32 9,5 27,000	RL-3,U RL	250 250 250 250 250 250 250 20 20 4.0 1.0 30 2.0 2.0 1.0	ug/kg 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 1.0 1.0 11,000 40 114 35,000 720	U U U U U U U U U U U U U U U U U C U C	500 500 500 500 500 500 8DL 200 200 1.00 300 300 2.00 100 4.00 200 200 200 200 200 200 200 200 200	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5 17,000	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 250 250 250 250 250 250 250 250 10 10 10 10 10 10 10 10 10 10 10 10 10	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0	50 50 50 50 50 50 50 10/25/00 Result mg kg 8,900 11 1,000 0,50 1,2 18,000 19 3,8 13,000 250	U U U U U U U U U U U U U U U U U U U	500 500 500 500 8DL 100 100 2.00 0.500 0.500 1.00 5.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 4.0 2.0 1.0 30 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 430 1.0 1.5,000 33 10 24,000 29 8,400 360 0.034	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,R RL-3	250 250 250 250 250 250 250 20 20 1.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	500 500 500 500 500 500 500 500 500 500	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 500 600 600	50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 11 30,000 9.4 7,500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 200 4.00 1.00 300 2.00 4.00 2.00 4.00 2.00 6.00 6.00 6.00 6.00 6.00 6.00 6	ug/kg 50 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 15,000 20 F 6.9 130 F 1.0 F 1.0 F 1.0 F 2.4,000 5.7 8,200 410 0.020	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 20 4.0 2.0 1.0 1.0 2.0 2.0 2.0 2.0 0.0 2.0 0.0 2.0 0.0 0	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 4.0 230 1.0 7,300 32 9.5 27,000 11 7,200	RL-3,U RL	250 250 250 250 250 250 250 250 20 4.0 1.0 30 2.0 2.0 10 4.0	ug/kg 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 20 8.0 1.0 11,000 40 14 35,000 12 10,000 720 0.061	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 8DL 200 200 1.00 300 300 2.00 100 4.00 200 200 200 200 200 200 200 200 200	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.55 17,000 29	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 250 250 250 250 250 250 250 250 10 10 0.50 1.0 5.0 2.0 1.0 0.50 1.0 0.50 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 100 RDt. 10 10 2.0 1.0 0.50 0.50 1.5 1.0 1.0 2.0 2.0	50 50 50 50 50 50 10/25/00 Result mg kg 8,900 11 1,000 0,50 1,2 18,000 19 3,8 13,000 250 4,800	U U U U U U U U U U U U U U U U U U U	500 500 500 500 100 100 2.00 0.500 15 1.00 1.00 5.00 2.00 10	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 8DL 20 20 4.0 2.0 1.0 30 2.0
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury	250 250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 1.0 15,000 3.3 10 24,000 29 8,400	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U Qual RL-3,U RL-3,R RL-3	250 250 250 250 250 250 250 20 40 20 1.0 1.0 2.0 2.0 2.0 2.0 0.0 2.0 2.0 2.0 2.0 2	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 600 600 600	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 11 30,000 9.4 7,500 0.083	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 200 4.00 2.00 2.00 2.00 2.00 2.00 2.0	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result 7 15,000 7 130 F 1.0 F 8,200 23 7.5 24,000 5.7 8,200 410 0.020 17	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 4.0 2.0 1.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20 4,0 239 1.0 7,300 32 9,5 27,000	RL-3,U RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 20 8.0 1.0 11,000 40 14 35,000 12 10,000 720 0.061	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 500 200 200	ug/kg 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.550 1.2 8,400 27 5.5; 17,000 29 4,700 220	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	250 250 250 250 250 250 250 250 250 10 10 10 10 10 10 10 10 10 10 10 10 10	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0	50 50 50 50 50 50 50 10/25/00 Result mg kg 8,900 11 1,000 0.50 1.2 18,000 19 3.88 13,000 250 4,800 220	U U U U U U Qual	500 500 500 500 100 1.00 0.500 1.50 1.00 5.00 2.00 1.00 0.000 1.00	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 20 1.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Aluminum Assenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 430 1.0 1.5,000 33 10 24,000 29 8,400 360 0.034	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	500 500 500 500 500 500 500 500 500 500	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 8RDL 200 200 200 200 200 200 200 20	50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 111 30,000 9.4 7,500 710 0.083 26 4.0	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 200 4.0 1.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result 7 15,000 1.0 F 8,200 23 7,5 24,000 5,7 8,200 17 4.0 F	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 4.0 2.0 1.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 4.0 230 1.0 1.0 7,300 32 9.5 27,000 11 7,200 750 0.032 22	RL-3,U RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 50 50 50 50 50 50 50 50 60 50 10/26/00 Result mg/kg 28,000 20 8.0 1.0 11,000 40 14 35,000 112 10,000 720 0.061	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 200 200 4.00 2.00 1.00 2.00 2.00 2.00 2.00 2.00 2	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 10 6.11 340 0.50 1.22 8,400 27 5.55 17,000 29 4,700 220	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 20 10 10 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	50 50 50 50 50 50 50 10/25/00 Result mg kg 8,900 11 1,000 0,50 1,2 18,000 19 3,8 13,000 250 4,800 220 0,050	U U U U U U U Qual	500 500 500 500 100 100 1.00 1.00 1.00 5.00 1.00	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 20 20 1.0 1.0 2.0 2.0 2.0 2.0 2.0 4.0 2.0 4.0 2.0 2.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 15,000 15,000 24,000 29 8,400 363 4.0 24,000	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 20 40 1.0 30 2.0 2.0 2.0 2.0 2.0 2.0 4.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	500 500 500 500 500 500 500 500 500 500	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 500 600 600	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4.600 37 111 30,000 9.4 7,500 710 0.083 26 4.0 800	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 200 1.00 1.00 300 2.00 1.00 2.00 1.00 2.00 2.00 4.00 2.00 4.00 2.00 2.00 2	ug/kg 50 50 50 50 50 50 50 50 50 50 10/26/00 Result 7 15,000 1.0 F 8,200 23 7,5 24,000 5,7 8,200 17 4.0 F	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 4.0 2.0 1.0 2.0 2.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 20 4.0 239 1.0 7,300 32 9,5 27,000 11 7,200 750 0.032	RL-3,U RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 1.0 1.0 11,000 11,000 12 10,000 720 0.061 32 4.0	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 200 2.00 2.0	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 10 6.1 340 0.50 1.2 8,400 27 5.5 17,000 29 4,700 220 0.032	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 250 10 10 0.50 1.0 0.50 1.0 0.50 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	500 500 500 500 500 500 500 500 500 500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 100 1.00 0.500 1.50 1.00 5.00 2.00 1.00 0.000 1.00	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 80 80 80 80 80 80 80 80 80 8
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.30 1.0 15,000 24,000 29 8,400 0.034 4.0	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	500 500 500 500 500 500 500 500 500 500	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	500 500 500 500 500 500 600 600	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4.600 37 111 30,000 9.4 7,500 710 0.083 26 4.0 800	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 200 1.00 1.00 2.00 1.00 2.00 1.00 2.00 2	ug/kg 50 50 50 50 50 50 50 50 50 50 50 6.9 130 6.9 130 7.5 24,000 5.7 8,200 410 0.020 17 4.0 8 820 20 8	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 20 4.0 2.0 1.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	250 250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 4.0 230 1.0 1.0 7,300 32 9.5 27,000 11 7,200 750 0.032 22	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 50 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 1.0 1.0 11,000 11,000 12 10,000 720 0.061 32 4.0	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 200 2.00 2.0	ug/kg 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5 17,000 29 4,700 0.032 21	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	250 250 250 250 250 250 250 250 20 10 10 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	500 500 500 500 500 500 500 500 500 500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 100 1.00 0.500 1.00 5.00 2.00 1.00 0.020 0.020 0.020 0.020 0.020	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 20 4.0 2.0 1.0 1.0 2.0 1.0 2.0 1.0 2.0 2.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2
Areclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Cadmium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 15,000 15,000 24,000 29 8,400 363 4.0 24,000	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 20 40 1.0 30 2.0 2.0 2.0 2.0 2.0 2.0 4.0 4.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	\$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$60 \$70 \$70 \$70 \$70 \$70 \$70 \$70 \$70 \$70 \$7	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4,600 37 11 30,000 9.4 7,500 710 0.083 26	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 200 1.00 1.00 2.00 2.00 2.00 2.00 2.0	ug/kg 50 50 50 50 50 50 50 50 50 50 50 6.9 130 6.9 130 7.5 24,000 5.7 8,200 410 0.020 17 4.0 8 820 20 8	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 20 4.0 2.0 1.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	250 250 250 250 250 250 10/26/00 Result mg/kg 26,000 4.0 230 1.0 7,300 32 9,5 27,000 11 7,200 0.032 4.0	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 20 4.0 2.0 1.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 50 50 50 50 50 50 50 50 50 60 50 10/26/00 Result mg/kg 28,000 20 8.0 1.0 1.0 11,000 11,000 720 0.061 32 4,0 800	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 200 200 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5 17,000 29 4,700 220 0.032 21 2.0 430	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	250 250 250 250 250 250 250 250 20 10 10 0.50 0.50 1.0 1.0 0.00 1.0 0.00 1.0 1.0 1.0 1.0	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	100 100 100 100 100 100 100 100 2.0 1.0 0.50 0.50 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	500 500 500 500 500 500 500 500 500 500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 100 1.00 1.00 0.500 1.00 5.00 1.00 1	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 20 4.0 2.0 1.0 1.0 2.0 1.0 2.0 1.0 2.0 2.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1250 Analysis Date Aluminum Antimony Arsenic Barium Beryllium Cadmium Cadmium Chromium Cobalt Iron Lead Magnesium Manganese Mercury Nickel Selenium Sodium Thallium	250 250 250 250 250 250 250 10/26/00 Result mg/kg 21,000 4.0 4.0 1.0 15,000 24,000 29 8,400 360 0.034 4,0	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 20 40 20 1.0 30 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.	\$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	\$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$60 \$70 \$70 \$70 \$70 \$70 \$70 \$70 \$70 \$70 \$7	50 50 50 50 50 50 50 10/26/00 Result mg/kg 31,000 4.2 190 1.0 4.600 37 11: 30,000 710 0.083 26 4.0 800 20	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 200 1.00 1.00 2.00	ug/kg 50 50 50 50 50 50 50 60 60 10/26/00 Result mg/kg 15,000 1.0 F 1.0	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 20 20 4.0 2.0 1.0 2.0 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	250 250 250 250 250 250 10/26/00 Result mg/kg 26.000 4.0 230 1.0 7.300 32 9.5 27,000 11 7.200 750 0.032 4.0	RL-3,U RL-3,R RL	250 250 250 250 250 250 250 250 20 4.0 2.0 1.0 30 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.	ug/kg 50 50 50 50 50 50 50 10/26/00 Result mg/kg 28,000 1.0 1.0 11,000 11,000 720 0.061 32 4.0 800 20 74	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 500 500 200 200 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	ug/kg 250 250 250 250 250 250 250 250 250 10/25/00 Result mg/kg 16,000 6.1 340 0.50 1.2 8,400 27 5.5 17,000 29 4,700 220 0.032 21 2.0 430	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U U	250 250 250 250 250 250 250 250 250 20 10 10 0.50 0.50 1.0 1.0 1.0 0.0 2.0 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	ug/kg 100 100 100 100 100 100 100 100 100 10	RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U RL-3,U U U	100 100 100 100 100 100 100 100 RDt. 10 100 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	500 500 500 500 500 500 500 500 500 500	U U U U U U U U U U U U U U U U U U U	500 500 500 500 500 100 100 100	50 50 50 50 50 50 50 50	U U U U U U U U U U U U U U U U U U U	50 50 50 50 50 50 50 50 50 20 20 40 20 1.0 1.0 20 20 20 20 20 20 20 20 20 2

C1 = Calibration Verification reco C1 = Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form, 131

C2 = Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form, 51

RL-1 = Reporting limit raised due RL-1 = Reporting limit raised due to sample matrix interference.

RL-3 = Reporting limit raised due RL-3 = Reporting limit raised due to high concentrations of non-target analytes.

U = Constituent not detected abov U = Constituent not detected above laboratory's reporting limits.



TABLE 4.2G

SUMMARY OF GEOTECHNICAL LABORATORY DATA WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 3

SAMPLE NUMBER BORING NO DEPTH	MOISTURE CONTENT	DRY DENSITY		IN SIZE %)	DIRECT SHE	AR STRENGTH	UNCONFINED COMPRESSION STRENGTH
(feet)	(%)	(pcf)	Sand	Silt/Clay	Cohesion (psf)	Friction Angle (degrees)	(psf)
HSA-1-5	19.7	97.5	_		_	_	-
HSA-1-10	18.1	103.7	_	_	_	_	-
HSA-1-25	2.2	89.4	_	_	_	_	-
HSA-1-30	12.2	95.9	-	-	-	_	
HSA-1-35	18.4	110.1	_	_	_	_	-
HSA-1-40	8.9	105.6			<u> </u>		
HSA-2-5	12.1	109.3	-		_	-	-
HSA-2-10	_	-		_	_	-	-
HSA-2-15	_	-	-	-	_	_	-
HSA-2-20	9.9	98.6	_	_	-	_	
HSA-2-25	-		95	7	_	_	_
HSA-2-30	6.2	102.3	_	-	<u> </u>	_	-
HSA-2-35	18.1	99.4	_	_	-	_	-
HSA-2-40							
HSA-3-5	_	_		_	_	-	
HSA-3-10	-	-	-	_	_	-	_
HSA-3-15	16.0	116.3	-	_	_	_	-
HSA-3-20	3.7	95.5		_	_	_	_
HSA-3-25	2.2	88.2		_	_	_	-
HSA-3-30	10.2	90.6			-		-
HSA-4-5	44.4	66.2	_	_		_	720
HSA-4-10	13.0	120.7	_	_	-	_	_
HSA-4-15	-	-	_	_	_	_	-
HSA-4-20	10.1	98.5	61	39	922	24	_
HSA-4-25	3.4	94.0	-	_	-	_	-
HSA-4-30	_ 10.5	105.1				-	



TABLE 4.2G

SUMMARY OF GEOTECHNICAL LABORATORY DATA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 3

SAMPLE NUMBER BORING NO DEPTH	MOISTURE CONTENT	DRY DENSITY		N SIZE %)	DIRECT SHEA	AR STRENGTH	UNCONFINED COMPRESSION
(feet)	(%)	(pcf)	Sand	Silt/Clay	Cohesion (psf)	Friction Angle (degrees)	STRENGTH (psf)
HSA-5-5	_	_	_		_		
HSA-5-10	38.3	80.6			-	_	403
HSA-5-15	13.1	122.8	-	-	-	_	_
HSA-5-20	-	-	-		-	-	-
HSA-5-25	4.8	107.5	-	-	_	_	-
HSA-5-30	17.3	93.7	-	-	-	_	-
HSA-5-35	17.7	103.0	_	-	-	_	-
HSA-5-40	24.0	104.5	-		-		
HSA-6-5		-	_	_	_	_	-
HSA-6-10	18.0	103.7		_	-	_	835
HSA-6-15	17.2	110.4	69	31	672	29	-
HSA-6-20	15.1	113.3		_	-	_	-
HSA-6-25	6.2	99.9	-	_	i –	_	_
HSA-6-30] -	-	94	6] -	<u> </u>	 -
HSA-6-35		-					-
HSA-7-5	19.2	107.3	-	-	_	-	1,584
HSA-7-10	14.2	121.6	-	_	_	_	-
HSA-7-15	-	-		-	_	_	-
HSA-7-20	6.4	99.3	-	_	_	_	-
HSA-7-30	16.4	105.4	-	_	_	_	_
HSA-7-35	5.5	97.9	98	2			-



TABLE 4.2G

SUMMARY OF GEOTECHNICAL LABORATORY DATA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 3 of 3

SAMPLE NUMBER BORING NO DEPTH	MOISTURE CONTENT	DRY DENSITY		N SIZE %)	DIRECT SHE	AR STRENGTH	UNCONFINED COMPRESSION
(feet)	(%)	(pcf)	Sand	Silt/Clay	Cohesion (psf)	Friction Angle (degrees)	STRENGTH (psf)
HSA-8-2	_	_			-	_	-
HSA-8-4		_	-	_	_	_	-
HSA-8-6	-		_	_	_	_	-
HSA-8-10	-	-	-	_	-	_	_
HSA-8-15	24.6	95.6	_	-	_	_	_
HSA-8-20	2.9	95.6	_	_	_	–	-
HSA-8-25	4.5	96.9	_		-	_	-
HSA-8-30	3.1	98.4	-	_	_	_	_
HSA-8-35			_	_	_	_	_

94-256/Rpt/ReDeInSuRe (Rev.2.0) (5/4/01/rw)



SUMMARY OF TCLP AND STLC RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 4

	_			Page 1 of 4
SAMPLE		SAMPLE	TCLP EXTRACT RESULTS	STLC EXTRACT RESULTS
NO.	AREA	TYPE	Constituents	Constituents
NO.		ITE	Exceeding TCLP ⁽¹⁾	Exceeding STLC
WELLCI		Fill		
WDI-LS-1	7	Fill	VOC's	VOC's
	Ì		None	None
			SVOC's	SVOC's
			Not Applicable	None
	1		Metals	Metals
		l	None	None
	l .		Pesticides/PCB's	Pesticides/PCB's
			None	None
WDI-LS-1	7	Waste	VOC's	VOC's
		1	Benzene ⁽²⁾	None
			Carbon Tetrachloride ⁽²⁾	SVOC's
	ļ	1	1,2 Dichloroethane ⁽²⁾	Not Applicable
			1,1 Dichloroethene ⁽²⁾	<u>Metals</u>
			PCE ⁽²⁾	None
			TCE ⁽²⁾	Pesticides/PCB's
	Í		Vinyl Chloride ⁽³⁾	None
	1		SVOC's	
	ł		Not Applicable	
ŀ	ŀ		<u>Metals</u>	
			None	
			Pesticides/PCB's	
			None	
WDI-LS-2	4	Fill	VOC's	VOC's
	Ì		Benzene ⁽²⁾	None
		[Carbon Tetrachloride ⁽²⁾	SVOC's
			1,2 Dichloroethane ⁽²⁾	Not Applicable
			1,1 Dichloroethene ⁽²⁾	<u>Metals</u>
			TCE ⁽²⁾	None
			Vinyl Chloride ⁽³⁾	Pesticides/PCB's
			SVOC's	None
			Not Applicable	
			<u>Metals</u>	
			None	
]	Pesticides/PCB's	
		L	None	

⁽¹⁾ Laboratory reporting limit for this compound exceeds TCLP limits.

⁽²⁾ Using a value of one-half the detection limit, the compound would be less than the TCLP limit.

⁽³⁾ Does not necessarily mean vinyl chloride is present, only that the detection limit is 1.0 to 1.9 mg/L.

SUMMARY OF TCLP AND STLC RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

CAMBLE		CAMBLE	TCLP EXTRACT RESULTS	STLC EXTRACT RESULTS
SAMPLE NO.	AREA	SAMPLE TYPE	Constituents Exceeding TCLP ⁽¹⁾	Constituents Exceeding STLC
WDI-LS-2	4	Waste	VOC's Benzene(2) Carbon Tetrachloride(2) 1,2 Dichloroethane(2) 1,1 Dichloroethene(2) PCE(2) TCE(2) Vinyl Chloride(3) SVOC's Not Applicable Metals None Pesticides/PCB's None	VOC's None SVOC's Not Applicable Metals None Pesticides/PCB's None
WDI-LS-3	5	Fill	VOC's Benzene ⁽²⁾ Carbon Tetrachloride ⁽²⁾ 1,2 Dichloroethane ⁽²⁾ TCE ⁽²⁾ Vinyl Chloride ⁽³⁾ SVOC's Not Applicable Metals None Pesticides/PCB's None	VOC's None SVOC's Not Applicable Metals None Pesticides/PCB's None
WDI-LS-3	5	Waste	VOC's Benzene ⁽²⁾ Carbon Tetrachloride ⁽²⁾ 1,2 Dichloroethane ⁽²⁾ 1,1 Dichloroethene ⁽²⁾ PCE ⁽²⁾ TCE ⁽²⁾ Vinyl Chloride ⁽³⁾ SVOC's Not Applicable Metals None Pesticides/PCB's None	VOC's None SVOC's Not Applicable Metals None Pesticides/PCB's None

(1) Laboratory reporting limit for this compound exceeds TCLP limits.
 (2) Using a value of one-half the detection limit, the compound would be less than the TCLP limit.
 (3) Does not necessarily mean vinyl chloride is present, only that the detection limit is 1.0 to 1.9 mg/L.

SUMMARY OF TCLP AND STLC RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

				Page 3 of 4
SAMPLE		SAMPLE	TCLP EXTRACT RESULTS	STLC EXTRACT RESULTS
NO.	AREA	TYPE	Constituents	Constituents
	<u> </u>		Exceeding TCLP ⁽¹⁾	Exceeding STLC
WDI-LS-4	2	Fill	VOC's Benzene ⁽²⁾ Carbon Tetrachloride ⁽²⁾ 1,2 Dichloroethane ⁽²⁾ Vinyl Chloride ⁽³⁾ SVOC's Not Applicable Metals None Pesticides/PCB's None	VOC's None SVOC's Not Applicable Metals None Pesticides/PCB's None
WDI-LS-4	2	Waste	VOC's Benzene ⁽²⁾ Carbon Tetrachloride ⁽²⁾ 1,2 Dichloroethane ⁽²⁾ 1,1 Dichloroethene ⁽²⁾ TCE ⁽²⁾ Vinyl Chloride ⁽³⁾ SVOC's Not Applicable Metals None Pesticides/PCB's None	VOC's None SVOC's Not Applicable Metals Lead ⁽⁴⁾ Pesticides/PCB's None
WDI-LS-5	R	Fill	VOC's Benzene(2) Carbon Tetrachloride(2) 1,2 Dichloroethane(2) 1,1 Dichloroethene(2) PCE(2) TCE(2) Vinyl Chloride(3) SVOC's Not Applicable Metals None Pesticides/PCB's None	VOC's None SVOC's Not Applicable Metals None Pesticides/PCB's None

- (1) Laboratory reporting limit for this compound exceeds TCLP limits.
- (2) Using a value of one-half the detection limit, the compound would be less than the TCLP limit.
- (3) Does not necessarily mean vinyl chloride is present, only that the detection limit is 1.0 to 1.9 mg/L.
- $^{(4)}$ A value of 5.07 mg/L, marginally exceeded the STLC limit of 5.0 mg/L.

SUMMARY OF TCLP AND STLC RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 4 of 4

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SAMPLE		SAMPLE	TCLP EXTRACT RESULTS	STLC EXTRACT RESULTS
NO.	AREA	TYPE	Constituents Exceeding TCLP ⁽¹⁾	Constituents Exceeding STLC
WDI-LS-5	R	Waste	VOC's Benzene ⁽²⁾ Carbon Tetrachloride ⁽²⁾ 1,2 Dichloroethane ⁽²⁾ 1,1 Dichloroethene ⁽²⁾ PCE ⁽²⁾ TCE ⁽²⁾ Vinyl Chloride ⁽³⁾ SVOC's Not Applicable Metals None Pesticides/PCB's None	VOC's None SVOC's Not Applicable Metals None Pesticides/PCB's None

94-256/Rpts/ReDeInSuRe Rev. 2 (5/4/01/rw)

⁽¹⁾ Laboratory reporting limit for this compound exceeds TCLP limits.

⁽²⁾ Using a value of one-half the detection limit, the compound would be less than the TCLP limit.

⁽³⁾ A value of 5.07 mg/L, marginally exceeded the STLC limit of 5.0 mg/L.

TABLE 4.4 SUMMARY OF TM NOS. 6 AND 8 DETECTED CHEMICAL DATA FOR EX-2 PUMP TESTS⁽¹⁾ WASTE DISPOSAL, INC. SUPERFUND SITE

															_			Page 1 of
WELL NO. (Phase)	VOLATILE ORGANIC	S EPA MET	HOD 8260	SEMIVOLAT EPA ME	TILE ORGANI THOD 8270	CS		CIDES/PCBs IETHOD 8081		M. EPA N	ETALS METHOD ⁽²⁾		EPA MET	D GREASE THOD 413.2 ng/L)	HYDROC EPA MET	ETROLEUM CARBONS HOD 418.1 g/L)	NS SIMULATED DISTILLATION	
	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Carbon Range	%
EX-2	Acetone	1.8	1.6	2-Methyl Phenol	0.23	<0.5	PCB-1248	<0.001	<0.050	Arsenic	0.097	0.12						
(Aqueous	Benzene	1.5	0.84	4-Methyl Phenol	2.2	4.0	PCB-1254	<0.001	<0.050	Barium	0.29	0.22						
Phase)	Chloroform	ND	0.43	Phenol	1.8	3.0	PCB-1260	<0.001	<0.050	Cadmium	<0.025	<0.025						
	2-Butanone	6.6	7.9				Pesticides	ND	ND	Chromium	2.1	<0.025						
	Carbon Disulfide	0.62	<0.25							Lead	< 0.025	< 0.025	93	45,000	85	44,000	NA	NA
	4-Methyl 2-Pentanone	11.0	13.0							Mercury	< 0.006	<0.0002				:		
	Toluene	1.7	1.4							Nickel	1.5	0.60						
	Trichloroethene	1.0	0.63							Thallium	< 0.025	<0.025						
	Vinyl chloride	0.89	0.51															
P-1	Acetone	ND	0.15	2-Methylnaphthalene	47.0	1.5	PCB-1248	0.13	<0.002	Arsenic	0.15	0.16						
(Aqueous	Benzene	1.6	1.1	Naphthalene	19.0	0.81	PCB-1254	<0.05	<0.002	Barium	0.56	0.50						
Phase)	2-Butanone	2.7	0.80	4-Methylphenol	ND	0.900	PCB-1260	0.42	<0.002	Cadmium	< 0.025	< 0.025						
	Chloroform	ND	0.079				Pesticides	ND	ND	Chromium	< 0.025	< 0.025						
Ì	Ethylbenzene	0.29	0.22							Lead	0.065	0.11	200	2.000	200	2.700		
	4-Methyl 2-Pentanone	5.5	2.4							Mercury	<0.0006	<0.0002	280	3,900	280	3,700	NA	NA
	Toluene	2.2	1.2							Nickel	0.098	0.095			}			
ĺ	Trans-1, 2-Dichlorethane	ND	0.048							Thallium	< 0.025	<0.025						
	Trichloroethene	ND	0.040															
	Vinyl chloride	ND	0.470															
P-2	Acetone	1.2	NA	2-Methylnaphthalene	1.7	NA	PCB-1248	< 0.0025	NA	Arsenic	0.27	NA						
(Aqueous	Benzene	0.64	NA	4-Methyl Phenol	6.7	NA	PCB-1254	< 0.013	NA	Barium	0.17	NA						
Phase)	2-Butanone	3.3	NA	Naphthalene	1.2	NA	PCB-1260	0.0025	NA	Cadmium	< 0.025	NA						
	4-Methyl 2-Pentanone	3.5	NA	Phenol	7.2	NA	Pesticides	ND	NA	Chromium	0.051	NA	200	NA	250		NA	NA
	Toluene	0.97	NA							Lead	0.040	NA	280	NA	250	NA NA	NA.	l NA
	Vinyl chloride	3.0	NA							Mercury	<0.0006	NA						
	Trichloroethane	0.40	NA							Nickel	0.32	NA						
										Thallium	<0.025	NA						
P-3	Benzene	0.32	NA	2-Methylnaphthalene	3.9	NA	PCB-1248	0.052	NA	Arsenic	0.16	NA						
(Aqueous	Ethylbenzene	0.41	NA	Naphthalene	1.6	NA	PCB-1254	<0.0025	NA	Barium	4.5	NA						
Phase)	Toluene	0.23	NA	Phenol	1.1	NA	PCB-1260	0.580	NA	Cadmium	<0.025	NA						
							Pesticides	ND	NA	Chromium	0.96	NA	240	NIA	220	N/A	NIA	NI A
Ī										Lead	2.1	NA	240	NA	230	NA	NA	NA
ŀ										Mercury	1100.0	NA						
										Nickel	0.29	NA						
Ī										Thallium	<0.025	NA						

Data presented is considered preliminary and subject to change on receipt of final laboratory reports. Values presented are for selected key constituents and those with detected values.

Various EPA methods are used for the metals analysis.

Prepump Test Analytical Results.

Samples were collected from wells that indicated an influence from EX-2.

NA = Not Analyzed.

ND = Not Detected.



SUMMARY OF TM NOS. 6 AND 8 DETECTED CHEMICAL DATA FOR EX-2 PUMP TESTS⁽¹⁾ WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

															· · · · · · · · · · · · · · · · · · ·	,,, <u>,,</u>	γ		Page 2 of
WELL NO (Phase)	VOLATILE ORGANI	CS EPA MET	THOD 8260	SEMIVOLAT EPA ME	TILE ORGAN THOD 8270	ICS		CIDES/PCBS ETHOD 8081			METALS METHOD ⁽²⁾		EPA M	ND GREASE ETHOD 413.2 (mg/L)	HYDRO EPA MET	ETROLEUM CARBONS `HOD 418.1 g/L)	I .	ED DISTILL ED EPA 3550)/8015
	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Carbon Range		% 6/11/98 ⁽⁴⁾
P-4	Acetone	1.5	NA	2-Methylnaphthalene	180	NA	PCB-1248	<0.025	NA	Arsenic	0.25	NA							
(Aqueous	Benzene	0.92	NA	Naphthalene	89	NA	PCB-1254	<0.025	NA	Barium	0.55	NA							
Phase)	2-Butanone	5.3	NA				PCB-1260	0.047	NA	Cadmium	<0.025	NA							
	Ethylbenzene	0.24	NA				Pesticides	ND	NA	Chromium	<0.025	NA	300	NA	290	NIA	NA	NA	NA NA
	4-Methyl 2-Pentanone	6.2	NA							Lead	<0.025	NA	300	INA	290	NA	INA INA	I NA	I NA
	Toluene	1.3	NA							Мегсигу	<0.0006	NA							
	Vinyl chloride	0.84	NA							Nickel	0.11	NA							
										Thallium	<0.025	NA							<u></u>
VW-9	Acetone	ND	1.6	2-Methylnaphthalene	62	38.0	PCB-1248	0.250	<0.100	Arsenic	0.17	0.13							
(Aqueous Phase)	Benzene	1.7	0.75	Naphthalene	32	<20	PCB-1254	<0.050	<0.100	Barium	0.97	0.39							
riiasc)	2-Butanone	12.0	8.0				PCB-1260	0.510	<0.100	Cadmium	0.050	<0.025							
	Chloroform	ND	0.40							Chromium	0.074	<0.025]				NA
	Ethylbenzene	2.4	<0.100							Lead	0.72	<0.025	500	350	430	340	NA	NA	
	4-Methyl 2 Pentanone	4.2	9.1							Mercury	< 0.003	<0.0002							
	Toluene	4.3	0.95							Nickel	0.27	0.35							
	Vinyl chloride	0.50	0.42							Thallium	<0.050	<0.025			1				
																	ļ		
P-1 (Free	Benzene	220	110	2-Methylnaphthalene	2,000	2,300	PCB-1248	<5.0	<0.020	Arsenic	<2.0	<2.0					1		
Product)	Ethylbenzene	500	300	Naphthalene	810	<850	PCB-1254	<5.0	<0.020	Barium	1.5	2.3							
	Toluene	1,400	760				PCB-1260	14	< 0.020	Cadmium	<0.50	<0.50					C8 - C13	30.2	28.1
	Tetrachloroethene	ND	110				Pesticides	ND	ND	Chromium	<1.0	<1.0	.,,	> 1.4	.,,	NIA	C14 - C19	33.9	33.4
	Trichloroethene	ND	70							Lead	<2.0	2.2	NA	NA	NA	NA	C20 - C27	21.9	24.6
ľ								-		Mercury	< 0.020	< 0.020					C28 – C40	14.0	13.5
										Nickel	2.5	1.7							
										Thallium	<10	<10							
P-2 (Free	Toluene	370	NA	2-Methylnaphthalene	1,700	NA	PCB-1248	<5.0	NA	Arsenic	NA	NA		······					
Product)				· · · · · · · · · · · · · · · · · · ·			PCB-1254	<5.0	NA	Barium	NA	NA]				
ľ			1				PCB-1260	7.4	NA	Cadmium	NA	NA					C8 - C13	37	NA
Ī							Pesticides	ND	NA	Chromium	NA	NA		***			C8 - C13 C14 - C19	32.7	NA
		. .						-		Lead	NA	NA	NA	NA	NA	NA	C20 - C27	20	NA
										Mercury	NA	NA					C28 - C40	l l	NA
Ì									_	Nickel	NA	NA							
ľ										Thallium	NA	NA							

Data presented is considered preliminary and subject to change on receipt of final laboratory reports. Values presented are for selected key constituents and those with detected values.

Various EPA methods are used for the metals analysis.

Prepump Test Analytical Results.

Postpump Test Analytical Results. Samples were collected from wells that indicated an influence from EX-2.



NA = Not Analyzed.

ND = Not Detected.

TABLE 4.4 SUMMARY OF TM NOS. 6 AND 8 DETECTED CHEMICAL DATA FOR EX-2 PUMP TESTS⁽¹⁾ WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

ADDITIONAL WELLS IN RESERVOIR	VOLATILE ORGANIC	CS EPA METI	HOD 8260	SEMIVOLATILE ORGANICS EPA METHOD 8270		PESTICIDES/PCBs EPA METHOD 8081		METALS EPA METHOD ⁽²⁾			OIL AND GREASE EPA METHOD 413.2 (mg/L)		TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1 (mg/L)		SIMULATED DISTILLATION MODIFIED EPA 3550/8015				
(Phase)	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Constituent (mg/L)	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	5/11/98 ⁽³⁾	6/11/98 ⁽⁴⁾	Carbon Range	5/11/98 ⁽³⁾	% 6/11/98 ⁽⁴⁾
PB-2	Benzene	NA	0.24	2-Methylphenol	NA	9.4	PCB-1248	NA	<0.10	Arsenic	NA	0.048							
(Aqueous	2-Butanone	NA	0.064	Naphthalene	NA	5.1	PCB-1254	NA	<0.10	Barium	NA	0.83							
Phase)	Ethylbenzene	NA	0.230				PCB-1260	NA	<0.10	Cadmium	NA	<0.050			Ì				
	Toluene	NA	0.110							Chromium	NA	0.033							
										Lead	NA	0.20	NA	NA	NA	NA	NA	NA	NA
										Mercury	NA	<0.0002		i			İ		
										Nickel	NA	0.065						1	
Ī										Thallium	NA	<0.025							
PB-4	Benzene	NA	0.079				PCB-1248	NA	<1.0	Arsenic	NA	0.030							
(Aqueous	Ethylbenzene	NA	0.0023	-			PCB-1254	NA	<1.0	Barium	NA	0.080							
Phase)	Vinyl Chloride	NA	0.045				PCB-1260	NA	<1.0	Cadmium	NA	<0.025							
										Chromium	NA	<0.025			1	1			
[Lead	NA	0.039	NA	NA	NA	NA	NA	NA	NA
										Mercury	NA	<0.0002							
[Nickel	NA	<0.050			İ				-
										Thallium	NA	< 0.025					1		
											-							į	
PB-6	Benzene	NA	0.017				PCB-1248	NA	<0.100	Arsenic	NA	0.077	······································						
(Aqueous Phase)	Ethylbenzene	NA	0.0097				PCB-1254	NA	<0.100	Barium	NA	0.15							
rilase)	trans-1,2-Dichloroethene	NA	0.0021				PCB-1260	NA	<0.100	Cadmium	NA	<0.025						l	
ļ	Toluene	NA	0.0025						ļ	Chromium	NA	<0.025							
	Vinyl Chloride	NA	0.035		ļ					Lead	NA	<0.025	NA	NA	NA	NA	NA	NA	NA
		<u> </u>			<u> </u>					Mercury	NA	<0.0002							
<u> </u>										Nickel	NA	< 0.050							
										Thallium	NA	<0.025					<u> </u>		
PB-2 (Free	Benzene	NA	19	2-Methylnaphthalene	NA	1,300	PCB-1248	NA	<0.20	Arsenic	NA	<2.0					C8 - C13	NA	25.9
Product)	Ethylbenzene	NA	130				PCB-1254	NA	<0.20	Barium	NA	<1.0						}	
	Toluene	NA	63				PCB-1260	NA	<0.20	Cadmium	NA	<0.50					C14 - C19	NA	28.4
		 	 							Chromium	NA	<1.0	NA	NA	NA	NA	C20 - C27	NIA.	26.8
-		 							 	Lead	NA NA	<2.0					C20 - C2/	NA	20.8
}						 			 	Mercury Nickel	NA NA	<0.020					C28 - C40	NA	18.6
ŀ		 	 						+	Thallium	NA NA	<10					l		

⁽¹⁾ Data presented is considered preliminary and subject to change on receipt of final laboratory reports. Values presented are for selected key constituents and those with detected values.
(2) Various EPA methods are used for the metals analysis.
(3) Prepump Test Analytical Results.
(4) Postpump Test Analytical Results. Samples were collected from wells that indicated an influence from EX-2.

NA = Not Analyzed. ND = Not Detected.



TABLE 4.5

ADDITIONAL MICROBIOLOGICAL AND CHEMICAL DATA FOR EX-2, -4 AND -6 PUMP TESTS WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

			MICROBIOL	OGICAL TES	TING			CHEMICAL	ANALYSES	
WELL NO.		Bacterial		Count I/ML)	Spe	cies	BTU V	alue/lb.	Sulfur Content (%)	
	5/11/98 ⁽¹⁾	6/11/98 ⁽²⁾	5/11/98 ⁽¹⁾	6/11/98 ⁽²⁾	5/11/98 ⁽¹⁾	6/11/98 ⁽²⁾	5/11/98 ⁽¹⁾	6/11/98 ⁽²⁾	5/11/98 ⁽¹⁾	6/11/98 ⁽²⁾
WDI-EX-2 (aqueous phase)	15	430	10	10	Alcaligenes/ Pseudomonas	Alcaligenes/ Pseudomonas	<175	NA	0.049	0.036
WDI-P-1 (aqueous phase)	930,000	930,000	650,000	55,000	Pseudomonas	Alcaligenes/ Pseudomonas	344	NA	0.269	0.750
WDI-P-2 (aqueous phase)	23	NA	60	NA	Alcaligenes/ Pseudomonas	NA	310	NA	0.726	NA
WDI-P-3 (aqueous phase)	430,000	NA	130,000	NA	Pseudomonas	NA	15,980	NA	0.796	NA
WDI-P-4 (aqueous phase)	7,500	NA	23,000	NA	Aeromonas	NA	613	NA	0.655	NA
WDI-VW-9 (aqueous phase)	93,000	75,000	90,000	9,500	Alcaligenes/ Pseudomonas	Alcaligenes/ Pseudomonas	1,160	NA	0.755	0.690
WDI-P-1 (free product)	NA	NA	NA	NA	NA	NA	6,674	9,957	0.836	0.779
WDI-P-2 (free product)	NA	NA	NA	NA	NA	NA	8,750	NA	0.667	NA
WDI-P-3 (free product)	NA	NA	NA	NA	NA	NA	19,166	NA	0.868	NA
WDI-P-4 (free product)	NA	NA	NA	NA	NA	NA	18,921	NA	0.723	NA
WDI-VW-9 (free product)	NA	93,000	NA	80,000	NA	Alcaligenes/ Pseudomonas	18,282	4,186	0.865	0.577



Prepump Test Analytical Data.
 Postpump Test Analytical Data. Wells that indicated influence from EX-2 pumping.

NA = Not analyzed

ADDITIONAL MICROBIOLOGICAL AND CHEMICAL DATA FOR EX-2, -4 AND -6 PUMP TESTS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 2

	MIC	ROBIOLOGICAL TES	STING	CHEMICAL	ANALYSES
WELL NO.	Anaerobic Bacterial (MPN/L)	Plate Count (CFU/ML)	Species	BTU Value/lb.	Sulfur Content (%)
	8/14/98 ⁽¹⁾	8/14/98 ⁽¹⁾	8/14/98 ⁽¹⁾	8/14/98 ⁽¹⁾	8/14/98 ⁽¹⁾
WDI-EX-4 (aqueous phase)	75	40	Pseudomonas/ Alcaligenes or putida	NA	NA
WDI-NSP-1 (aqueous phase)	930,000	80,000	Pseudomonas Spp (nol aeruginosa)	NA	NA
WDI-NSP-2 (aqueous phase)	930,000	60,000	Pseudomonas aeruginosa or putida	NA	NA
WDI-NSP-3 (aqueous phase)	930,000	210,000	Pseudomonas aeruginosa or putida	NA	NA
WDI-NDP-1 (aqueous phase)	930,000	45,000	Pseudomonas acruginosa or putida	NA	NA
WDI-NDP-2 (aqueous phase)	1,500	1,300	Pseudomonas Spp (nol aeruginosa)	NA	NA
WDI-NDP-3 (aqueous phase)	2,400,000	2,900,000	Aeromonas hydrophila	NA	NA
WDI-NDP-3 (free product)	NA	NA	NA	18,928	0.870

94-256 Rpts/ReDeInSuRe Rev. 1 (8/11/99/mc)

(1) Prepump Test Analytical Data.

NA = Not analyzed



SUMMARY LIQUID LEVEL FIELD MONITORING PRIOR TO PUMP TEST WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 3

				,	Page 1 of 3
WELL I.D.	DATE	DEPTH TO FREE PHASE (ft)	DEPTH TO AQUEOUS PHASE (ft)	FREE PHASE THICKNESS (ft)	CHANGE IN FREE PHASE THICKNESS (ft)
	12/16/97	ND	ND	ND	ND
	12/19/97	ND	23.24	ND	ND
	12/26/97	ND	23.21	ND	ND
	2/4/98	22.40	22.80	0.4	NM
	2/11/98	22.30	22.73	0.43	0.03
WDI-EX-1	2/19/98	22.32	22.70	0.42	0.01
	3/25/98	21.18	22.00	0.82	0.40
	5/4/98	NM	NM	NM	NM
	5/7/98	NM	NM	NM	NM
	5/12/98	NM	NM	NM	NM
	5/13/98	NM	NM	NM	NM
	12/16/97	ND	NM	ND	ND
	12/19/97	ND	NM	ND	ND
	12/26/97	ND	NM	ND	ND
	2/4/98	ND	NM	ND ·	ND
	2/11/98	ND	NM	ND	ND
WDI-EX-2	2/19/98	ND	NM	ND	ND
	3/25/98	ND	NM	ND	ND
	5/4/98	ND	NM	ND	ND
	5/7/98	ND	4.51	ND	ND
	5/12/98	ND	5.39	ND	ND
	5/13/98	ND	4.54	ND	ND
	12/16/97	8.06	10.80	2.74	NM
	12/19/97	8.12	9.21	1.09	1.65
	12/26/97	8.10	9.31	1.21	0.12
	2/4/98	7.00	9.95	2.95	1.74
WDY D 1	2/11/98	9.87	13.10	3.23	0.28
WDI-P-1	2/19/98	9.33	12.58	3.25	0.02
	3/25/98	8.86	11.89	3.03	0.22
	5/4/98	8.18	10.12	1.94	1.09
	5/7/98	7.80	8.32	0.52	1.42
	5/12/98	8.68	NM	NM	NM
	5/13/98	7.64	NM	NM	NM
	12/16/97	5.70	6.10	0.40	NM
	12/19/97	5.38	6.50	1.12	0.72
	12/26/97	5.65	6.31	0.66	0.46
WDIDA	2/4/98	3.45	5.45	2.00	1.34
WDI-P-2	2/11/98	3.54	5.39	1.85	0.15
	2/19/98	3.33	4.46	1.13	0.72
	3/25/98	2.70	5.40	2.70	1.57
	5/4/98	2.75	4.05	1.30	1.40

ND = Not Detected NM = Not Measured

SUMMARY LIQUID LEVEL FIELD MONITORING PRIOR TO PUMP TEST WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

P	a	ge	2	of	

		, <u> </u>			Page 2 of
WELL I.D.	DATE	DEPTH TO FREE PHASE (ft)	DEPTH TO AQUEOUS PHASE (ft)	FREE PHASE THICKNESS (ft)	CHANGE IN FREE PHASE THICKNESS (ft)
WDI-P-2	5/7/98	2.82	4.52	1.70	0.40
(cont.)	5/12/98	3.12	NM	NM	NM
(cont.)	5/13/98	3.02	NM	NM	NM
	12/16/97	5.10	10.85	5.75	NM
	12/19/97	4.72	10.11	5.39	0.36
	12/26/97	4.92	12.07	7.15	1.76
	2/4/98	2.50	9.71	7.21	0.06
WDI-P-3	2/11/98	2.32	7.59	5.27	1.94
WDI-1-3	2/19/98	1.94	7.55	5.61	0.34
	3/25/98	1.85	5.84	3.99	1.62
	5/4/98	3.12	4.15	1.03	2.96
	5/7/98	3.18	4.72	1.54	0.51
	5/12/98	3.12	NM	NM	NM
	5/13/98	2.73	NM	NM	NM
	12/16/97	5.05	7.55	2.50	NM
	12/19/97	0.95	8.22	7.27	4.77
	12/26/97	4.80	9.34	4.54	2.73
	2/4/98	3.84	9.20	5.36	0.82
	2/11/98	3.42	9.27	5.85	0.49
WDI-P-4	2/19/98	3.29	9.40	6.11	0.26
	3/25/98	4.24	9.24	5.00	1.11
	5/4/98	3.57	8.67	5.10	0.10
	5/7/98	2.39	8.88	6.49	1.39
	5/12/98	3.20	NM	NM	NM
	5/13/98	2.79	NM	NM	NM
	12/16/97	6.05	6.90	0.85	NM
	12/19/97	5.75	8.20	2.45	1.60
	12/26/97	6.00	6.72	0.72	1.73
	2/4/98	4.30	5.11	0.81	0.09
WDI-VW-09	2/11/98	4.32	5.09	0.77	0.04
WDI- V W-05	2/19/98	4.03	4.73	0.70	0.07
	3/25/98	3.60	4.40	0.80	0.10
	5/4/98	6.23	7.57	1.34	0.54
	5/7/98	3.81	4.86	1.05	0.29
	5/12/98	4.60	NM	NM	NM
	5/13/98	3.84	NM	NM	NM
WDI-EX-4	8/17/98	ND	12.65	NM	NM
	8/19/98	ND	17.58	NM	NM
WDI-NDP-1	8/17/98	ND	5.99	NM	NM
i i	8/19/98	ND	5.6	NM	NM
WDI-NDP-2	8/17/98	ND	4.81	NM	NM
ND - Not Detected	8/19/98	ND	4.8	NM	NM

ND = Not Detected NM = Not Measured



SUMMARY LIQUID LEVEL FIELD MONITORING PRIOR TO PUMP TEST WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Pa	ge	3	of

94-256 Rpts/ReDeInSuRe Rev. 1 (8/4/99/ey)

					rage 3 of 3
WELL I.D.	DATE	DEPTH TO FREE PHASE (ft)	DEPTH TO AQUEOUS PHASE (ft)	FREE PHASE THICKNESS (ft)	CHANGE IN FREE PHASE THICKNESS (ft)
111D1 NDD 3	8/17/98	4.29	NM	NM	NM
WDI-NDP-3	8/19/98	4.21	NM	NM	NM
WDI-EX-6	8/19/98	4.88	9.06	4.18	NM
WDI-SDP-1	8/19/98	8.69	9.70	1.01	NM
WDI-3D1-1	8/20/98	NM	22.0	NM	NM
WDI-SDP-2	8/19/98	8.81	9.28	0.47	NM
WDI-SDP-3	8/19/98	7.50	9.20	1.70	NM
WDI-3DI-3	8/20/98	NM	20.9	NM	NM
WDI-SSP-1	8/19/98	ND	5.80	NM	NM
WDI-SSP-2	8/19/98	5.85	6.25	0.4	NM
WDI-SSP-3	8/19/98	ND	7.5	NM	NM

ND = Not Detected NM = Not Measured

TABLE 4.7

HYDRAULIC YIELD FOR PUMP TESTS AT EX-2, -4 AND -6 WASTE DISPOSAL, INC. SUPERFUND SITE

	EX-	2 ⁽¹⁾			E	X-4		EX-6					
Cycle No.	Recovery (feet)	Time (minutes)	Yield ⁽²⁾ (gpm)	Cycle No.	Recovery (feet)	Time (minutes)	Yield ⁽²⁾ (gpm)	Cycle No.	Recovery (feet)	Time (minutes)	Yield ⁽²⁾ (gpm)		
Cycle 1	3.1	97	0.05	Cycle 1	5.04	6,889.8	0.0011	Cycle 1	4.629	130	0.052		
Cycle 2	4.62	112	0.06	Cycle 2	4.84	13,840	0.0005	Cycle 2	4.449	160	0.041		
Cycle 3	6.6	189	0.05					Cycle 3	5.49	260	0.031		
Cycle 4	7.5	236	0.05					Cycle 4	5.213	280	0.027		
Cycle 5	7.13	246	0.04					Cycle 5	5.201	320	0.024		
Cycle 6	6.35	244	0.04					Cycle 6	5.333	360	0.022		
Cycle 7	5.8	143	0.06					Cycle 7	6.61	460	0.021		
								Cycle 8	6.233	580	0.016		
								Cycle 9	6.257	740	0.012		
								Cycle 10	6.647	1300	0.008		
Average		_	0.05	Average		-	0.0008	Average	-	-	0.0232		

94-256/Rpts/ReDeInSuRe Rev. 1 (8/4/99/ey)



 ⁽¹⁾ EX-2 results from Interim TM No. 6 July 1998.
 (2) Yield = Recovery/Time (ft/min) x Volume (ft/gal)

SUMMARY OF CHEMISTRY DATA TM NOS. 6 AND 8 PUMP TEST FOR EX-2 ACTIVITIES WASTE DISPOSAL, INC. SUPERFUND SITE

- Volatile Organics (EPA Method 8260)
 - Low levels of typical petroleum VOCs were detected including benzene, toluene and ethylbenzene.
- Semivolatile Organics (EPA Method 8270)
 - Low levels of SVOCs including naphthalene and methylnaphthalene, and methylphenols were detected.
- PCBs/Pesticides (EPA Method 8080)
 - PCB levels (PCB-1248, -1254 and -1260) ranging from 0.0025 to 14 ppm were detected.
 - Pesticides were not detected in the samples.
- Metals
 - Low levels of metals including arsenic, barium, cadmium, lead, mercury, nickel and thallium were detected.
- Oil and Grease (EPA Method 413.2)
 - Levels of oil and grease ranged from 93 to 45,000 mg/L.
 - EX-2 had the highest level at 45,000 mg/L, which may have been due to suspended oil in the water phase.
- Total Petroleum Hydrocarbons (EPA Method 418.1)
 - Levels were similar to oil and grease analysis, with EX-2 having the highest TPH of 44,000 mg/L.
- Simulated Distillation
 - Hydrocarbons were primarily found to be greater than 0.14 and were observed to be typical straight chain aliphatics.
- Microbial Analyses
 - Anaerobic and aerobic plate counts indicated relatively low levels of bacteria. All results were below 1 million units/L which is considered low.
 - Bacteria found were identified as facultative anaerobic bacteria. Strict anaerobic bacteria were not identified.
- BTU Analyses
 - BTU levels were found to be consistent with the oil and grease/TPH analyses.
 - BTU levels from the oils indicate the materials may have fuel value if disposal is required.
- Sulfur Analyses
 - Low levels of sulfur were detected at levels less than 1 percent by weight.



TABLE 4.8A

SUMMARY OF CHEMISTRY DATA TM NO. 6 PUMP TEST ACTIVITIES FOR EX-4 AND -6 WASTE DISPOSAL, INC. SUPERFUND SITE

- Volatile Organics (EPA Method 8260)
 - Low levels of typical petroleum VOCs were detected including benzene, toluene, ethylbenzene, 4-methyl2-pentanone and vinyl chloride.
- Semivolatile Organics (EPA Method 8270)
 - Low levels of SVOCs including naphthalene and methylnaphthalene, methylphenols, phenanthrene, and phenol were detected.
- PCBs/Pesticides (EPA Method 8080)
 - PCB levels (PCB-1248, -1254 and -1260) ranging from 0.0016 ppm to 350 ppm were detected.
 - Pesticides were not detected in the samples.

Metals

- Low levels of metals including arsenic, barium, cadmium, lead, mercury, nickel and thallium were detected.
- Oil and Grease (EPA Method 413.2)
 - Levels of oil and grease ranged from 19 to 3,100 mg/L.
 - NDP-3 had the highest level at 3,100 mg/L, which may have been due to suspended oil in the water phase.
- Total Petroleum Hydrocarbons (EPA Method 418.1)
 - Levels were similar to oil and grease analysis, with NDP-3 having the highest TPH of 2,800 mg/L.

Simulated Distillation

- Hydrocarbons were primarily found to be greater than 0.14 and were observed to be typical straight chain aliphatics.

Microbial Analyses

- Anaerobic and aerobic plate counts indicated relatively low levels of bacteria. WD1-NDP-3 which had results of 2,400,000 anaerobic bacterial count and 2,900,000 plate count. All other results were below 1 million units/L which is considered low.
- Bacteria found were identified as facultative anaerobic bacteria. Strict anaerobic bacteria were not identified.

BTU Analyses

- BTU levels were found to be consistent with the oil and grease/TPH analyses.
- BTU levels from the oils indicate the materials may have fuel value if disposal is required.

Sulfur Analyses

- Low levels of sulfur were detected at levels less than 1 percent by weight.



SUMMARY OF TM NO. 6 DETECTED CHEMICAL DATA EX-4 AND -6 PREPUMP TEST⁽¹⁾ WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 5

WELL NO. (Phase)		VOLATILE ORGANICS EPA METHOD 8260		SEMIVOLATILE ORGANICS EPA METHOD 8270		PESTICIDES/PCBs EPA METHOD 8081		LS HOD ⁽²⁾	OIL AND GREASE EPA METHOD 413.2 (mg/L)	TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1 (mg/L)	SIMUL DISTILL MOD EPA 35.	ATION IFIED
	Constituent (mg/L)	8/14/98 ⁽³⁾	Constituent (mg/L)	8/14/98 ⁽³⁾	Constituent (mg/L)	8/14/98 ⁽³⁾	Constituent (mg/L)	8/14/98 ⁽³⁾	8/14/98(3)	8/14/98 ⁽³⁾	Carbon Range	%
EX-4	Acetone	< 0.025	2-Methyl Phenol	0.13	PCB-1248	<0.001	Arsenic	0.055	84	74	NA	NA
(aqueous	Benzene	0.56	4-Methyl Phenol	0.33	PCB-1254	< 0.001	Barium	< 0.050				
phase)	Chloroform	< 0.005	Phenol	0.29	PCB-1260	<0.001	Cadmium	< 0.025]			
	2-Butanone	0.096	2-Methylnaphthalene	0.11	Pesticides	ND	Chromium	< 0.025	}	\ \ \ \ \		
	Carbon Disulfide	< 0.013	Naphthalene	0.22			Lead	< 0.025]			
	4-Methyl 2-Pentanone	0.11					Mercury	<0.0006				
	Toluene	0.44					Nickel	< 0.050]			
	Trichloroethene	0.0059					Thallium	0.048				
	Vinyl Chloride	0.24										
NSP-1	Acetone	0.27	2-Methylnaphthalene	0.46	PCB-1248	< 0.0012	Arsenic	0.098	200	130	NA	NA
(aqueous	Benzene	0.44	Naphthalene	0.45	PCB-1254	< 0.0012	Barium	1.0	1			
phase)	2-Butanone	< 0.05	Phenanthrene	0.12	PCB-1260	< 0.0012	Cadmium	< 0.025				
	Chloroform	< 0.01	Pyrene	0.059	Pesticides	ND	Chromium	0.73				
	Ethylbenzene	0.14				1	Lead	1.3				
	4-Methyl 2-Pentanone	0.047					Mercury	< 0.0006	1			
	Toluene	0.23		[Nickel	< 0.050	1	ļ		
	Trichloroethene	< 0.01				T	Thallium	< 0.025	1			
	Vinyl Chloride	0.054										
NSP-2	Acetone	< 0.025	2-Methylnaphthalene	0.055	PCB-1248	<0.001	Arsenic	< 0.025	36	32	NA	NA
(aqueous	Benzene	0.14	4-Methyl Phenol	0.029	PCB-1254	< 0.001	Barium	0.10	1			
phase)	2-Butanone	<0.025	Naphthalene	0.080	PCB-1260	<0.001	Cadmium	< 0.025				
	Ethylbenzene	0.021	Phenol	0.037	Pesticides	ND	Chromium	< 0.025				
	4-Methyl 2-Pentanone	0.084					Lead	0.029				
	Toluene	< 0.013				11	Mercury	< 0.0006	1			
	Trichloroethene	< 0.005					Nickel	< 0.050				
	Vinyl Chloride	0.045					Thallium	< 0.025				
NSP-3	Acetone	0.75	2-Methylnaphthalene	0.3	PCB-1248	0.012	Arsenic	0.033	190	150	NA	NA
(aqueous	Benzene	0.46	4-Methyl Phenol	0.37	PCB-1254	<0.002	Вагіит	0.53	1			
phase)	2-Butanone	0.28	Naphthalene	0.17	PCB-1260	< 0.005	Cadmium	< 0.025)		
	trans-1,2-Dichloroethene	1	Phenanthrene	0.055	Pesticides	ND	Chromium	< 0.033				
	Ethylbenzene	0.097	Phenol	0.46		1	Lead	0.23	1			
	4-Methyl 2-Pentanone	0.16	1477414				Mercury	<0.0006				
	Tetrachloroethene	0.0067				<u> </u>	Nickel	< 0.050	1			
	Trichloroethene	0.019		İ		 	Thallium	<0.025	-1			
	Vinyl Chloride	0.42				†		1 2 2 2 2				
	Toluene	0.54				† 			1			

Data presented is considered preliminary and subject to change on receipt of final laboratory reports. Values presented are for selected key constituents and those with detected values.

Various EPA methods are used for the metals analysis.

⁽³⁾ Prepump Test Analysis Results.

NA = Not Analyzed.

SUMMARY OF TM NO. 6 DETECTED CHEMICAL DATA EX-4 AND -6 PREPUMP TEST(1) WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 5

												Tage z or .
WELL NO. (Phase)		VOLATILE ORGANICS EPA METHOD 8260		SEMIVOLATILE ORGANICS EPA METHOD 8270		PESTICIDES/PCBs EPA METHOD 8081		LS HOD ⁽²⁾	OIL AND GREASE EPA METHOD 413.2 (mg/L)	TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1 (mg/L)	SIMUL DISTILL MODI EPA 355	ATION FIED
	Constituent (mg/L)	8/14/98 ⁽³⁾	Constituent (mg/L)	8/14/98 ⁽³⁾	Constituent (mg/L)	8/14/98 ⁽³⁾	Constituent (mg/L)	8/14/98 ⁽³⁾	8/14/98 ⁽³⁾	8/14/98 ⁽³⁾	Carbon Range	%
NDP-1	Acetone	0.19	2-Methylnaphthalene	0.09	PCB-1248	< 0.001	Arsenic	< 0.025	61	49	NA	NA
(aqueous	Benzene	0.45	4-Methyl Phenol	0.068	PCB-1254	<0.001	Barium	0.061				
phase)	Chloroform	< 0.005	Naphthalene	0.23	PCB-1260	< 0.001	Cadmium	< 0.025				
	2-Butanone	0.033	Phenol	0.095	Pesticides	ND	Chromium	< 0.025			Ì	
	Carbon Disulfide	< 0.013					Lead	< 0.025		ļ	l l	
	Ethylbenzene	0.083					Mercury	< 0.0006				
	4-Methyl 2-Pentanone	0.061					Nickel	< 0.050	}			
	Toluene	0.16					Thallium	< 0.025	1			
	Trichloroethene	<0.005]	1		
	Vinyl Chloride	0.049							}			
NDP-2	Acetone	0.66	2-Methylnaphthalene	0.11	PCB-1248	<0.001	Arsenic	0.12	85	70	NA	NA
(aqueous	Benzene	0.64	4-Methyl Phenol	0.27	PCB-1254	< 0.001	Barium	< 0.05				
phase)	2-Butanone	0.063	Naphthalene	0.28	PCB-1260	< 0.001	Cadmium	< 0.025				
	Chloroform	< 0.005	Phenol	0.70	Pesticides	ND	Chromium	<0.025	1			
	Ethylbenzene	0.13					Lead	< 0.025	1	Į	Į į	
	4-Methyl 2-Pentanone	0.099	1				Mercury	< 0.0006				
	Toluene	0.44				1	Nickel	< 0.05				
	Trichloroethene	< 0.005					Thallium	< 0.025	1			
	Vinyl Chloride	0.16										
NDP-3	Acetone	0.31	2-Methylnaphthalene	0.38	PCB-1248	0.68	Arsenic	< 0.025	3,100	2,800	NA	NA
(aqueous	Benzene	0.48	2-Methyl Phenol	0.05	PCB-1254	< 0.13	Barium	0.089				
phase)	2-Butanone	0.14	4-Methyl Phenol	0.40	PCB-1260	2.1	Cadmium	< 0.025	1			
	4-Methyl 2-Pentanone	0.14	Naphthalene	0.22	Pesticides	ND	Chromium	< 0.025	1	ł		
	Toluene	0.49	Phenanthrene	0.07			Lead	0.067	1			
	Trichloroethene	0.44	Phenol	0.29			Mercury	< 0.0006	1	:		
	Vinyl Chloride	0.008					Nickel	< 0.05				
	trans-1,2-Dichloroethene	0.0078					Thallium	< 0.025	1			
NDP-3	Benzene	<100	2-Methylnaphthalene	110	PCB-1248	0.084	Arsenic	2.2			C8 - C13	20
(free	Ethylbenzene	180	Naphthalene	310	PCB-1254	< 0.05	Barium	99]		C14 - C19	28.7
product)	Toluene	360	Phenanthrene	76	PCB-1260	0.29	Cadmium	< 0.5	Ī	•	C20 - C27	25.4
					Pesticides	ND	Chromium	2.3]		C28 - C40	25.7
							Lead	49			1	
							Mercury	< 0.020]		1	
		[[·			Nickel	14				
						1	Thallium	<10	1	}		

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Various EPA methods are used for the metals analysis.



⁽³⁾ Prepump Test Analysis Results.

NA = Not Analyzed.

SUMMARY OF TM NO. 6 DETECTED CHEMICAL DATA(1) EX-4 AND EX-6 PREPUMP TEST WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 3 of 5

WELL NO. (Phase)	VOLATILE ORGA EPA METHOD 8		SEMIVOLATILE ORGANICS EPA METHOD 8270		PESTICIDES/PCBs EPA METHOD 8081		METAL EPA METH		OIL AND GREASE EPA METHOD 413.2 (mg/L)	TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1 (mg/L)	SIMUL DISTILI MOD EPA 35	LATION IFIED
	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	8/20/98 ⁽³⁾	8/20/98 ⁽³⁾	Carbon Range	%
EX-6	Acetone	0.74	Anthracene	0.67	PCB-1248	0.31	Arsenic	0.0076	1,900	1,800	NA	NA
(aqueous	Benzene	0.69	2-Methylnaphthalene	2.1	PCB-1254	<0.05	Barium	0.034				
phase)	2-Butanone	2.4	2-Methyl Phenol	0.67	PCB-1260	0.33	Cadmium	< 0.005	ļ			
	Ethylbenzene	0.36	4-Methyl Phenol	6.6	Pesticides	ND	Chromium	< 0.005	j			
	4-Methyl 2-Pentanone	2.0	Naphthalene	0.7			Lead	< 0.005				
	Tetrachloroethene	0.21	Phenanthrene	0.58		ļ	Mercury	< 0.0002				
	Toluene	0.47	Phenol	3.8			Nickel	0.029				
	Trichloroethene	0.16					Thallium	< 0.005]			
	Vinyl Chloride	0.59										
SDP-3	Benzene	1.1	2-Methylnaphthalene	1.6	PCB-1248	<0.0091	Arsenic	NA	2,400	2,300	NA	NA
(aqueous	2-Butanone	<0.05	2-Methyl Phenol	2.0	PCB-1254	<0.001	Barium	NA	<u> </u>			
phase)	Ethylbenzene	0.22	4-Methylphenol	3.5	PCB-1260	0.0016	Cadmium	NA	<u> </u>			
	4-Methyl 2-Pentanone	0.15	Naphthalene	1.0	Pesticides	ND	Chromium	NA_				
	Toluene	1.1	Phenol	2.9			Lead	NA				
	Trichloroethene	< 0.01					Mercury	NA		1		
	Vinyl Chloride	0.036					Nickel	NA _				
							Thallium	NA				
SDP-2	Benzene	0.21	2-Methylnaphthalene	0.34	PCB-1248	0.031	Arsenic	0.0069	1,200	1,100	NA	NA
(aqueous	2-Butanone	0.11			PCB-1254	< 0.005	Barium	0.074]		}	
phase)	Ethylbenzene	0.063			PCB-1260	0.035	Cadmium	< 0.005]		ŀ	
	4-Methyl 2-Pentanone	0.062			Pesticides	ND ND	Chromium	< 0.005]		1	
ļ	Toluene	0.36					Lead	< 0.005			İ	
	Vinyl Chloride	0.12					Mercury	< 0.0002			İ	
	Trichloroethene	0.05					Nickel	< 0.010				
	Tetrachloroethene	0.018					Thallium	0.0057				
SSP-1	Acetone	0.4	2-Methylnaphthalene	0.74	PCB-1248	0.032	Arsenic	< 0.005	400	380	NA	NA
(aqueous	Benzene	0.44	Naphthalene	0.32	PCB-1254	<0.01	Barium	0.13				
phase)	Ethylbenzene	0.049			PCB-1260	0.082	Cadmium	< 0.005]			
	4-Methyl 2-Pentanone	< 0.013			Pesticides	ND	Chromium	0.0057				
1	Toluene	0.22					Lead	0.018	}	1	}	
	Trichloroethene	< 0.005					Mercury	<0.0002				
	Vinyl Chloride	0.071					Nickel	<0.01]			
I							Thallium	< 0.005				

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Various EPA methods are used for the metals analysis.

Prepump Test Analysis Results.



NA = Not Analyzed.

SUMMARY OF TM NO. 6 DETECTED CHEMICAL DATA EX-4 AND -6 PREPUMP TEST(1) WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 4 of 5

WELL NO. (Phase)		VOLATILE ORGANICS EPA METHOD 8260		SEMIVOLATILE ORGANICS EPA METHOD 8270		PESTICIDES/PCBs EPA METHOD 8081		.S IOD ⁽²⁾	OIL AND GREASE EPA METHOD 413.2 (mg/L)	TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1 (mg/L.)	SIMUL DISTILL MODI EPA 355	ATION FIED
	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	8/20/98(3)	8/20/98 ⁽³⁾	Carbon Range	%
SSP-2	Acetone	0.20	2-Methylnaphthalene	0,94	PCB-1248	0.047	Arsenic	0.011	140	130	NA	NA
(aqueous	Benzene	0.21			PCB-1254	< 0.02	Barium	0.031				
phase)	Ethylbenzene	0.23			PCB-1260	0.042	Cadmium	< 0.005				
	4-Methyl 2-Pentanone	< 0.013			Pesticides	ND	Chromium	0.016		İ	ļ	
	Toluene	0.0084					Lead	0.027	1			
	Trichloroethene	< 0.005				I I	Mercury	< 0.002			l į	
	Vinyl Chloride	0.039					Nickel	< 0.01]			
							Thallium	< 0.005			İ	
SSP-3	Acetone	0,8	4-Methyl Phenol	0.086	PCB-1248	< 0.001	Arsenic	< 0.005	19	17	NA	NA
(aqueous	Benzene	0.33	Phenol	0.15	PCB-1254	<0.001	Barium	0.26				
phase)	2-Butanone	0.42			PCB-1260	<0.001	Cadmium	< 0.005				
	Ethylbenzene	0.051			Pesticides	ND	Chromium	0.0096		ļ		
	Tetrachloroethene	0.0063					Lead	0.013	1			
	4-Methyl 2-Pentanone	0.23				ii	Mercury	< 0.0002				
	Toluene	0.45					Nickel	<0.01				
	Vinyl Chloride	0.23				*	Thallium	< 0.005	1			
	Trichloroethane	0.033							1			
EX-6	Benzene	<100	2-Methylnaphthalene	1,600	PCB-1248	170	Arsenic	2.9	NA	NA	C8 - C13	24.7
(free	Ethylbenzene	590			PCB-1254	<130	Barium	39			C14 - C19	38.9
product)	Toluene	140			PCB-1260	170	Cadmium	< 0.5	1		C20 - C27	26.0
					Pesticides	ND	Chromium	56		·	C28 - C40	10.0
							Lead	12	1		•	
							Mercury	<0.02				
·		1				1	Nickel	23	ì			
							Thallium	<10	1			
SDP-3	Benzene	240	2-Methylnaphthalene	1,600	PCB-1248	<5.0	Arsenic	<2.0	NA	NA	C8 - C13	34.8
(free	Ethylbenzene	<100	Naphthalene	860	PCB-1254	<5.0	Barium	28		1	C14 - C19	34.0
product)	Toluene	1,400			PCB-1260	5.6	Cadmium	<0.5	1		C20 - C27	23.0
					Pesticides	ND	Chromium	<1.0	1	Į	C28 - C40	8.83
l				!		T 1	Lead	<2.0	1			
							Mercury	<0.02	1			
		1					Nickel	15	1			
							Thallium	<10	1			

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Various EPA methods are used for the metals analysis.



⁽³⁾ Prepump Test Analysis Results.

NA = Not Analyzed.

SUMMARY OF TM NO. 6 DETECTED CHEMICAL DATA EX-4 AND -6 PREPUMP TEST(1) WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 5 of 5

WELL NO. (Phase)	VOLATILE ORG EPA METHOD		SEMIVOLATILE ORGANICS EPA METHOD 8270		PESTICIDES/PCBs EPA METHOD 8081		METALS EPA METHOD ⁽²⁾		OIL AND GREASE EPA METHOD 413.2 (mg/L)	TOTAL PETROLEUM HYDROCARBONS EPA METHOD 418.1 (mg/L)	SIMULAT SIMULAT DISTILLAT MODIFII D 418.1 FPA 3550/	
	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	Constituent (mg/L)	8/20/98 ⁽³⁾	8/20/98 ⁽³⁾	8/20/98 ⁽³⁾	Carbon Range	%
	Benzene	130	2-Methylnaphthalene	910	PCB-1248	100	Arsenic	<2.0	NA	NA	C8 - C13	25.5
1	Ethylbenzene	<100			PCB-1254	<100	Barium	18			C14 - C19	26.6
į	Tetrachloroethene	200			PCB-1260	350	Cadmium	< 0.5			C20 - C27	26.8
SDP-1	Toluene	1,800			Pesticides	ND	Chromium	18			C28 - C40	11.11
(free												
product)		1				<u></u>	Lead	10				_
							Mercury	< 0.02				
							Nickel	14				
]						l	Thallium	<10]]	

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Various EPA methods are used for the metals analysis.

⁽³⁾ Prepump Test Analysis Results.

NA = Not Analyzed.

LIQUIDS LEVELS IN EPA PIEZOMETERS TM NO. 12 ACTIVITIES WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 5

	DATE	LIQUID LEV		LIQUID AFTER I		FINAL CH LIQUID		CHANGE IN WATER	RECOVERY	INITIAL PRODUCT	FINAL
WELL ID	DATE MONITORED	PRODUCT	WATER	PRODUCT	WATER	PRODUCT	WATER	LEVEL	RECOVERT	THICKNESS	THICKNES
	MONTORED	(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft.)	(ft.)	(ft.)	(%)	(ft.)	(ft.)
	10/01/98	ND	4.98	ND	3.90			+1.08	121.7	ND	ND
A-4(S)	10/01/98	117		ND	3.58			+1.40	128.1	-	
	10/02/98	:		ND	3.55	ND	+1.43	+1.43	128.7	-	
	10/01/98	5.18	15.10	ND	13.85	t		+1.25	108.3	9,92	0.23
A-4 (D)	10/01/98			ND	7.82			+7.28	148.2	ļ ·	
` '	10/02/98			2.17	2.40	+3.01	+12.70	+12.70	184.1		-
A-5	10/01/98	ND	5.30	ND	15.76			-10.46	NA	ND	ND
	10/01/98			ND	8.86	'		-3.56	32.8]	
	10/02/98	-		ND .	5.33	ND '	-0.03	-0.03	99.4		
	10/01/98	5.23	5.90	5.54	6.57	!		-0.67	NA	0.67	NA
A-6	10/01/98			NM	5.32	1		+0.58	109.8		
	10/02/98			5.14	NM	+0.09	+0.58	NA	NA -		
	10/01/98	ND	4.42	ND	10.95	 		-6.53	NA	ND	ND
B-4	10/01/98			ND	9.48			-5.06	13.4	İ	
	10/02/98			4.94	ND	+4.94	-5.06	ND	NA		
B-5	10/01/98	4.10	4.85	4.7	NM			NA	NA	0.75	0.0
	10/02/98			ND	4.12	-4.10	+0.73	+0.73	115.1	1	:
	10/01/98	4.38	4.64	13.56	14.45			-9.81	NA	0.26	NA
B-6	10/01/98			5.40	6.18	1		-1.54	66.8		
	10/02/98			3.96	NM	+0.42	-1.54	NA	NA	ļ	
	10/01/98	3.87	4.18	7.80	8.02			-3.84	NA	0.31	NA
B-7	10/01/98		-	NM	6.49			-2.31	44.7		
	10/02/98			4.45	NM	0.58	-2.31	NA .	NA NA		į
	10/01/98	ND	3.40	ND	14.01	† 		-10.61	NA	ND	ND
B-8	10/01/98			ND .	13.15			-9.75	6.1		
	10/02/98			ND	9.16	ND '	-5.76	-5.76	34.6		
	10/02/98	4.09	4.12	ND	11.00	· · · · · · · · · · · · · · · · · · ·		-6.88	NA	-0.03	ND
C-3	10/02/98			ND	5.05			-0.93	77.4		
	10/05/98			ND	4.30	-4.09	-0.18	-0.18	95.6		
	10/02/98	ND	4.60	ND	4.77			-0.17	NA	ND	ND
C-4	10/02/98			ND .	4.60			0.00	100.0		-
	10/05/98			ND "	4.60	ND	0.00	0.00	100.0	1	
	10/05/98	ND	3.90	ND	6.62			-2.72	NA	ND	ND
C-5	10/05/98			ND	4.57			-0.67	82.8	<u> </u>	
	10/06/98			ND	4.24	ND .	-0.34	-0.34	91.3		
C-8	10/01/98	ND	3.42	ND	4.80	<u> </u>		-1.38	NA	ND	ND
	10/02/98		•	ND	3.75	ND .	-0.33	-0.33	90.4		

⁽¹⁾ Initial Reading, 1-Hr Reading, 24-Hr Reading

Note: Some of the levels collected after the 1-hour readings exceeded 24-hours. Refer to date monitored.

NA = Not applicable

ND = Not detected

NM = Not measured

Ft. bgs = Feet below ground surface

S = Shallow

D = Deep

^{+ =} Greater than initial (prepurge) reading

^{- =} Less than initial (prepurge) reading

LIQUIDS LEVELS IN EPA PIEZOMETERS TM NO. 12 ACTIVITIES WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

		LIQUID LEV	EL BEFORE	LIQUID		FINAL CHANG	•	CHANGE IN		INITIAL	Page 2 of FINAL
WELL ID	DATE	PUR		AFTER F	PURGE"	LEV		WATER	RECOVERY	PRODUCT	PRODUCT
WELLID	MONITORED	PRODUCT	WATER	PRODUCT	WATER	PRODUCT	WATER	LEVEL		THICKNESS	THICKNESS
		(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft.)	<u>(ft.)</u>	(ft.)	(%)	(ft.)	(ft.)
C-9 (S)	10/01/98	ND	DRY	NM	NM	NM	NM	NA	NA	NA	NA
C-9 (D)	10/01/98	3.39	NM	NM	NM	NM	NM	NA	NA	NA	NA
	10/02/98	ND	3.55	ND	5.47			-1.92	NA	ND	ND
D-3 (S)	10/02/98	-		ND	4,94			-1.39	60.8		
	10/05/98			ND	3.60	ND	-0.05	-0.05	98.6		
	10/02/98	3.45	3.51	ND	3.57			-0.06	NA	0.06	0.02
D-3 (D)	10/02/98	`		ND	3.53			-0.02	99.4	f	1
	10/05/98			3.58	3.60	-0.13	-0,09	-0.09	97.4	İ	
	10/02/98	4.15	4.25	ND	14.70			-10.45	NA	0.10	0.02
D-4	10/02/98	,		ND	8.79	1		-4.54	40.2		
	10/05/98	,		4.13	4.15	+0.02	+0.10	+0.10	102.4		
	10/02/98	5.02	5.07	ND	6.02			-0.95	NA	0.05	ND
D-5	10/02/98			ND	5.10		·	-0.03	99,4	ļ	l
	10/05/98			ND .	5.12	-5.02	-0.05	-0.05	99.0		1
	10/02/98	ND	5.00	ND	5.35			-0.35	NA	ND	ND
D-6 (S)	10/02/98			ND	5.09	1		-0.09	98.2	1	
	10/05/98			ND .	4.90	ND	+0.10	+0.10	102.0	1	i
	10/02/98	4.67	5.58	NM	12.02			-6.44	NA	0.91	ND
D-6 (D)	10/02/98			NM .	5.98			-0.40	92.8		[
	10/05/98			ND	4.98	-4.67	+0.60	+0.60	110.8	ļ	ľ
D-7	10/01/98	3.15	4.40	NM	13.65	1		-9.25	NA	1.25	NA
	10/02/98			3.08	NM	+0.07	-9.25	NA	NA NA		
D-8	10/01/98	ND	4.12	ND	17.95			-13.83	NA	ND	ND
	10/02/98			ND	5.81	ND	-1.69	-1.69	59.0		1
D-9	10/01/98	3.95	5.85	NM	NM			NA	NA	1.90	NA
	10/02/98			4.00	NM	-0.05	NM	NA	NA NA	1	1
	10/05/98	4.00	4.50	ND	17.00			-12.5	NA	0.50	ND
E-1	10/05/98			ND '	13.75	1		-9.25	19.1	1	
	10/06/98	·		ND	7.20	-4,00	-2.70	-2.7	40.0		
	10/05/98	2.97	3.00	6,50	6.55			-3.55	NA	0.03	0.09
E-2	10/05/98			NM '	6.00	1		-3,00	8.4		i -
	10/06/98			4.80	4,89	-1.83	-1.89	-1.89	37.0		
	10/02/98	ND	3,40	ND	17.14	1		-13.74	NA NA	ND	ND
E-3	10/02/98		-	ND '	13.20			-9,80	23.0		
	10/05/98			ND	3.80	ND	-0.40	-0.40	88.2		
	10/02/98	2.91	3.08	ND	13.79			-10.71	NA	0.17	ND
E-4	10/02/98			ND	5.10			-2.02	34.4		1
	10/05/98		-	ND	3.08	-2.91	1).00	0.0	100,0		1

Offinitial Reading, 1-Hr Reading, 24-Hr Reading Note: Some of the levels collected after the 1-hour readings exceeded 24-hours. Refer to date monitored. NA = Not applicable ND = Not detected NM = Not measured

ed ired

Ft. bgs = Feet below ground surface

D = Deep + = Greater than initial (prepurge) reading - = Less than initial (prepurge) reading

S = Shallow

LIQUIDS LEVELS IN EPA PIEZOMETERS TM NO. 12 ACTIVITIES

WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 3 of 5

		LIQUID		LIQUID AFTER F		FINAL CH		CHANGE IN		INITIAL	Page 3 o
WELL ID	MONITORED	BEFORE				LIQUID		WATER LEVEL	RECOVERY	PRODUCT THICKNESS	PRODUCT THICKNES
	MONITORED	PRODUCT (ft. bgs)	WATER (ft. bgs)	PRODUCT (ft. bgs)	WATER	PRODUCT (ft.)	WATER (ft.)	(ft.)	(%)	(ft.)	(ft.)
	10/02/98	2.40			(ft. bgs) 6,10	(11.)	(11.)	-0.95	NA NA	2.75	2.22
		2.40	5.15	NM						2./3	2.22
E-5	10/02/98			4.29	5.40			-0.25	95.1		
	10/05/98			2.96	5.18	-0.56	-0.03	-0.03	99.4		
	10/02/98	3.05	4.19	18.10	18.17			-13.98	NA	1,14	0.15
E-6	10/02/98			NM .	6.26			-2.07	50.6		
	10/05/98			3.33	3,48	-0.28	+0.71	+0.71	116.9		
E-7	10/01/98	2.59	6.20	NM .	NM			NA	NA	3.61	NA
	10/02/98			3,08	NM	-0,49	NM	NA	NA		
E-8	10/01/98	3.15	5.50	11.03	NM	1 .		NA	NA	2.35	NA
	10/02/98			4.21	NM	-1,06	NM	NA	NA		
E-9	10/01/98	3.86	8.15	NM	NM			NA	NA	4.29	NA
	10/02/98			3.90	NM	-0.04	NM.	NA	NA.		
	10/05/98	3.05	4.55	NM	6.50			-1.95	NA	1.5	1.6
F-1	10/05/98	•		3,90	5.50	' '		-0.95	79.1		
	10/06/98	·		3.50	5.10	0.00	-0.55	-0.55	87.9		
	10/05/98	3.35	10.92	NM	16.77			-5.85	NA	7.57	3.91
F-2	10/05/98	·		7,00	12.90	i '		-1.98	81.9		ĺ
	10/06/98			3.75	7.66	0.40	+3.26	+3.26	129.9		
	10/05/98	4.00	4,22	NM	6.74	1		-2.52	NA	0.22	0.88
F-3	10/05/98			NM '	5.60	[-1.38	67.3	[l
	10/06/98			4,00	4,88	0,00	-0.66	-0,66	84.4		
	10/05/98	3.36	4.20	6,61	7.31	† · · · · · · · · · · · · · · · · · · ·		-3.11	NA	0.84	0.87
F-4	10/05/98		-	3.90	5.63			-1.43	65.9	1	}
	10/06/98			3.58	4.45	-0.22	-0.25	-0.25	94.0		
	10/02/98	3.14	5.30	14.06	14.95	 		-9.65	NA	2.16	0.13
F-6	10/02/98			NM .	8.95			-3.65	31.1		ţ
	10/05/98			5.00	5.13	-1.86	+0.17	+0.17	103.2		-
	10/02/98	ND	5.00	ND	DRY			NA	NA	NA	NA
F-7(S)	10/02/98	1.7		ND '	5.70			-0.70	86.0		
(10/05/98			ND	5.65	ND '	-0.65	-0.65	87.0		1
-	10/02/98	1.80	10.12	3.80	NM	 	******	NA	NA.	8.32	6.26
F-7 (D)	10/02/98	• • • • • • • • • • • • • • • • • • • •		5.30	9.70	1		+0,42	104.2	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\ \
/ (D)	10/05/98	1		3.82	10.08	-2.02	+0.04	+0.04	100.4		ŀ
	10/02/98	3.67	4.01	NM	8,46		777,04	-4.45	NA	0.34	0.20
F-8	10/02/98	3.47	4.01	7.70	7.76			3.75	6.5) 	0.20
10	10/05/98					0.12	0.20		92.8		
	10/05/98			4.10	4.30	-0.43	-0.29	-0.29	92.8		

(1) Initial Reading, 1-Hr Reading, 24-Hr Reading

Note: Some of the levels collected after the 1-hour readings exceeded 24-hours. Refer to date monitored.

NA = Not applicable

ND = Not detected

NM = Not measured

Ft. bgs = Feet below ground surface

S = Shallow

D = Deep

+ = Greater than initial (prepurge) reading

- = Less than initial (prepurge) reading

LIQUIDS LEVELS IN EPA PIEZOMETERS TM NO. 12 ACTIVITIES WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page		

•	LEVEL	LIQUID		FINAL CE	IANGE IN	CHANGE IN		INITIAL	Page 4 of :
	E PURGE	AFTER F	PURGE"	LIQUID	LEVEL	WATER	RECOVERY	PRODUCT	PRODUCT
PRODUCT	WATER	PRODUCT	WATER	PRODUCT	WATER	LEVEL		THICKNESS	THICKNESS
(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft.)	(ft.)	(ft.)	(%)	(ft.)	(ft.)
2.79	6.80	6.95	NM		- <u>-</u>	NA	NA	4.01	2.04
		4.28	6.04			+0.76	8.111		
		2.85	4.89	-0.06	+1.91	+1.91	128.1		_
3.00	9.45	NM	12.85	T		-3,40	NA	6.45	4.35
	•	4.15	12.35	·		-2.90	69.3		
		3,10	7.45	-0.10	+2,00	+2.00	121.3		
3.65	7.77	6.75	16.00	I		-8.23	NA	4.12	3.42
	•	4.29	6.56			+1.21	115.5		
	•	3.92	7.34	-0.27	+0.43	+0.43	105.5		
4.10	7.95	5.60	15.00			-7.05	NA	3.85	3.5
	•	4.36	5.85			+2.10	126.4		
	•	4.05	7.55	+0.05	+0.40	+0.40	105.0		
3.65	9.70	4.00	8.38			+1.32	113.6	6.05	4.72
	•	4,10	7.88			+1.82	118.8		
	•	3.78	8.50	-0.13	+1.20	+1.20	112,4		
4.60	7.00	7.12	17.30			-10.30	NA	2.40	0.85
		7.70	7.85	,		-0.85	87.9	_	
	•	5.00	5.85	-0.40	+1.15	+1.15	116.4		
3.10	13.56	5.98	10.75			+2.81	120.7	10.46	11.02
		3.30	14.88	,		-1.32	90.3		ļ
		2.84	13.86	+0.26	-0.30	-0.30	97.8		·
1.40	7.30	9.25	00.11			-3.70	NA	5.90	1.06
		4.65	4.74			+2.56	135.1	l	
		4.10	5.16	-2.70	+2.14	+2.14	129.3		
2.34	3.84	3.75	NM			NA	NA	1.50	0.05
		3.70	3.78			+0.06	135.1		
		3.70	3.75	-1.36	+0.09	+0.09	129.3		1
ND	3.96	ND	2.35		, , ,	+1.61	NA	ND	ND
		ND	3.18	1		+0.78	101.6	·	}
	:	ND	3.17	ND	+0.79	+0.79	102.3	-	İ
ND	2,95	ND	3.20			-0.25	140.7	ND	ND
		ND	2.90			+0.05	119.7	İ	1
		ND	2.93	ND	+0.02	+0.02	119.9	Į.	į.
5.15	8.10	NM				-3.00	NA	2.95	1.52
				1		1		1	
		1 .		-0.11	+1.32	+1.32		1	
_	5.15	5.15 8.10		5.15 8.10 NM 11.10 5.45 6.65	5.15 8.10 NM 11.10 5.45 6.65	5.15 8.10 NM 11.10 5.45 6.65	5.15 8.10 NM 11.10 -3.00 5.45 6.65 +1.45	5.15 8.10 NM 11.10 -3.00 NA 5.45 6.65 +1.45 117.9	5.15 8.10 NM 11.10 -3.00 NA 2.95 5.45 6.65 +1.45 117.9

(1) Initial Reading, 1-Hr Reading, 24-Hr Reading

NE.

S = Shallow D = Deep

Note: Some of the levels collected after the 1-hour readings exceeded 24-hours. Refer to date monitored.

NA = Not applicable ND = Not detected NM = Not measured

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LIQUIDS LEVELS IN EPA PIEZOMETERS TM NO. 12 ACTIVITIES WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 5 of 5

94-25t/Rpt-/ReDeInSuRe Res 2/0 (5/4/01/rs)

		LIQUID		LIQUID		FINAL CH		CHANGE IN		INITIAL	FINAL
WELL ID	DATE	BEFORE	PURGE	AFTER P	URGE	LIQUID	LEVEL	WATER	RECOVERY	PRODUCT	PRODUCT
WELL ID	MONITORED	PRODUCT	WATER	PRODUCT	WATER	PRODUCT	WATER	LEVEL		THICKNESS	THICKNESS
		(ft bgs.)	(ft. bgs)	(ft. bgs)	(ft. bgs)	(ft.)	(ft.)	(ft.)	(%)	(ft.)	(ft.)
	10/05/98	ND	5.15	ND	5.15			0.00	100.0	ND	ND
H-3 (S)	10/05/98			ND	5.25	·		-0.10	98.1		
	10/06/98	· ·		ND	5.26	ND	-0.11	-0.11	97.9	1	
	10/05/98	5.06	5.07	5.06	5.07		_	0.00	100.0	0.01	0.10
H-3 (D)	10/05/98			5.10	5.15			-0.08	98.4		
	10/06/98			5.10	5.20	-0.04	-0.13	-0.13	97.4		•
	10/05/98	3.40	9.87	13.00	17.36			-7.49	NA	6.47	5.2
H-4	10/05/98			6.13	9.20	,		+0.67	106.8		· -
	10/06/98			4.00	9.20	-0.60	+0.67	+0.67	106.8		
	10/05/98	4.60	5.65	6.90	10.12		_	-4.47	NA	1.05	1.11
H-5	10/05/98	•		4.65	4.70			+0.95	116.8		
	10/06/98			4.47	5.58	+0.13	+0.07	+0.07	101.2		
	10/02/98	4.19	5.00	NM	12.30	1		-7.30	NΛ	0.81	0.08
H-6	10/02/98			6.30	6,40			-1.40	72.0		
	10/05/98			4.32	4.40	-0.13	+0.60	+0.60	112.0		
	10/02/98	4.92	5.55	NM	10.50	 		-4.95	NΛ	0.63	0.15
H-7	10/02/98			4.98	8.50	,		-2.95	46.8		
	10/05/98	 I		5.00	5.15	-0.08	+0.40	+0.40	107.2	{	· · ·—- ·
	10/02/98	ND	4.65	ND	14.10	<u> </u>		-9.45	NA	ND	ND
H-8	10/02/98			ND "	4.68			-0.03	99,4		
	10/05/98			ND .	4.65	ND .	0.00	0.00	100.00		
	10/05/98	5.05	6.52	NM	6.70	 		-0.18	NA	1.47	1.43
I-4	10/05/98			5.15	6.35			+0.17	102.6		
	10/06/98			5.17	6,60	-0.08	-0.08	-0.08	98.8	1	
	10/05/98	3.05	4.80	NM	7,45	†		-2.65	NA	1.75	3.00
1-5	10/05/98			3.60	7.00			-2.20	54.2		
	10/06/98	•	-	3.00	6.00	+0.05	-1.20	-1.20	75.0		-
	10/02/98	3.65	4.25	NM	3.70	 		+0.55	112.9	0.60	0.21
1-6	10/02/98			3.69	3.76	•		+0.49	111.5		
	10/05/98			3.74	3.95	-0.09	+0.30	+0.30	107.1		
	10/02/98	ND	4.12	ND	4,20	<u> </u>		-0.08	NA	ND	ND_
1-7	10/02/98	' "		ND	4,10			+0.02	100.5	1	
• •	10/05/98			ND .	4.15	ND .	-0.03	-0.03	99.3	1	

(1) Initial Reading, 1-Hr Reading, 24-Hr Reading

Note: Some of the levels collected after the 1-hour readings exceeded 24-hours. Refer to date monitored.

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SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 10

WELL NO.	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA N	IETALS METHOD) ⁽	1)	HYDROC (EPA MET	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(phase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
RW-1 ⁽⁴⁾													
RW-2	Acetone	0.17	ND		ND	ND	Aluminum	11	0.39	33	19	9.8	7.6
(aqueous)	Benzene	0.26	0.044				Antimony	0.015	ND				
	cis-1,2-Dichloroethene	ND	0.012				Arsenic	0.4	0.13				
	Ethylbenzene	0.048	0.0065				Barium	0.73	0.14				
	4-Methyl-2-Pentanone	ND	0.0067				Calcium	470	48				
	Tetrachloroethene	ND	0.0024				Chromium, total	0.036	0.021				
	Toluene	0.054	0.0049				Cobalt	0.018	0.012				
	Trichloroethene	ND	0.0021				Iron	17	1.2				
	Vinyl chloride	0.092	0.0089				Lead	0.12	0.078				
	o-Xylene	ND	0.0039				Magnesium	21	5.7]			
	m, p-Xylenes	ND	0.0057				Manganese	1.5	0.55				
							Nickel	0.11	0.056				
							Selenium	0.01	ND				
							Sodium	350	450				
							Vanadium	0.073	0.19				
							Zinc	0.4	0.16				
RW-3	Benzene	-	0.7		-	ND	Aluminum		0.66	<u> </u>	19	-	9
(aqueous)	cis-1,2-Dichloroethene		0.29				Arsenic		0.096]			
	Ethylbenzene	-	0.53				Barium	-	0.1]			
	Tetrachloroethene		4				Calcium		40				
	Toluene	_	1.5				Chromium, total	_	0.013	J			
	Trichloroethene	_	0.65				Iron	_	1.1				
	o-Xylene	_	0.93				Lead	_	0.039				
	m, p-Xylenes	_	2.2				Magnesium	_	1.9				
							Manganese		0.081				
							Nickel	_	0.074				
							Sodium	_	820				
							Vanadium	_	0.053				
							Zinc	_	0.052			1	

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.
 RW-1 is a dry well and was not sampled.

- = Not analyzed.

= Not detected. ND



SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 10

													Page 2 of 1
WELL NO. (phase)	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA I	IETALS METHOD) ⁽	1)	TOTAL PE HYDROC (EPA MET) (pp	ARBONS HOD 418.1)	P	H units)
(priase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
RW-3	Benzene	170	14	PCB-1260	5.5	6.2	Barium	3.2	-	_	_	_	-
(oil)	cis-1,2-Dichloroethene	ND	8.8				Calcium	110	_]			
	Ethylbenzene	390	35				Iron	11					
	Tetrachloroethene	970	660				Lead	5.1	_				
	Toluene	1,000	81				Nickel	7.4					
	Trichloroethene	130	88				Vanadium	3.9	_				
	o-Xylene	ND	68									Ì	
	m, p-Xylenes	ND	170										
RW-4	Acetone	ND	1.9	PCB-1260	0.0028	0.041	Aluminum	ND	0.48	160,000	16	9.2	7.3
(aqueous)	Benzene	ND	0.65	<u> </u>			Arsenic	0.032	0.38]			
	2-Butanone	ND	0.47				Barium	0.075	0.21]			
	cis-1,2-Dichloroethene	ND	0.16				Calcium	1.9	36]			
	Ethylbenzene	ND	0.17				Chromium, total	0.0058	0.0087				
	4-Methyl-2-Pentanone	ND	0.54	ļ			Cobalt	ND	0.0058				
	Tetrachloroethene	ND	0.066				Iron	0.92	1.2]			
	Toluene	ND	0.91				Lead	0.82	0.042				
	Trichloroethene	ND	0.17				Magnesium	0.16	5				
	Vinyl chloride	ND	0.079	ļ			Manganese	ND	0.63				
	o-Xylene	ND_	0.35				Nickel	ND	0.085				
	m, p-Xylenes	ND _	0.65				Sodium	8.4	780				
							Vanadium	ND_	0.031]			
							Zinc	0.056	0.061				
RW-4	Benzene	68	100	PCB-1260	48	28	Barium	2.9	-	_	-	_	_
(oil)	Ethylbenzene	210	370				Cadmium	77	_]			
	Tetrachloroethene	130	290				Lead	5.6]			
	Toluene	420	630				Nickel	1]			
	Trichloroethene	77	160				Sodium	370]			
	o-Xylene	ND	750										
	m, p-Xylenes	ND	1,400					1					

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.
 RW-1 is a dry well and was not sampled.

– Not analyzed.

= Not detected.



SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 3 of 10

													Page 3 of 10
WELL NO.	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA N	IETALS METHOD) (1)	HYDROC (EPA MET	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(phase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
RW-5	Benzene	0.39	0.46		ND	ND	Aluminum	0.76		32	_	8.1	_
(aqueous)	Ethylbenzene	0.15	0.098				Arsenic	0.077	-				
	Toluene	0.22	0.42				Barium	0.18	-			ì	
	o-Xylene	ND	0.24				Calcium	59]			
	m, p-Xylenes	ND	0.49				Cobalt	0.014					
				1			Iron	1.3	_		1		
							Lead	0.007					
							Magnesium	21	_]		ļ	
							Manganese	1.1]			
							Nickel	0.021					
							Sodium	430	_				
							Zinc	0.029					
RW-6	Benzene	_	9.3	PCB-1242	_	0.0033	Aluminum		0.93	-	1,300	-	11
(aqueous)	2-Butanone		32	PCB-1250		0.0036	Antimony		0.021				
	cis-1,2-Dichloroethene		3.2				Arsenic	_	0.17				
	Ethylbenzene	_	2.5				Barium	-	0.2	<u> </u>			
	4-Methyl-2 pentanone		32				Calcium		96				
	Tetrachloroethene	-	0.7				Chromium, total		0.0083	4	ľ	ľ	
	Toluene		22				Iron		0.98				
	Trichloroethene		0.95				Lead		0.02				
	Vinyl chloride		1.3				Magnesium		0.2	4			
	o-Xylene	-	4.2				Nickel		0.33	4			
	m, p-Xylenes		11				Selenium	-	0.0081	1			
							Sodium		1,200	1			
							Vanadium	-	0.024	1			
							Zinc	L	0.04			l	

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.
 RW-1 is a dry well and was not sampled.

- = Not analyzed.

ND = Not detected.



SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 4 of 10

													Page 4 of 10
WELL NO.	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA I	IETALS METHOD) ⁽	1)	HYDROC (EPA MET	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(phase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
RW-6	Benzene	190	_	PCB-1260	8.5	-	Barium	7.8	-	-		_	-
(oil)	Ethylbenzene	420	_				Calcium	210	_	}			
	Toluene	1,000	_				Iron	19	-				
							Lead	9.3	_				
							Nickel	14	_				
						• •	Vanadium	7.2	-				
RW-7	Acetone	0.51	1.1		ND	ND	Aluminum	2.0	0.54	62	3,700	10.6	9.9
(aqueous)	Benzene	0.45	0.64				Antimony	ND	0.011				
	2-Butanone	0.67	1.6				Arsenic	0.24	0.25				
	cis-1,2-Dichloroethene	ND	1.3				Barium	0.12	0.087				
	Ethylbenzene	0.089	0.15				Calcium	64	21				
	4-Methyl-2 pentanone	0.77	1.5				Chromium, total	ND	0.079				
	Tetrachloroethene	0.063	0.061				Iron	2.9	0.94				
	Toluene	0.67	1.3				Lead	0.02	0.037			İ	
	Trichloroethene	0.31	0.24				Magnesium	4.6	1.1	•			
	Vinyl chloride	0.37	0.22				Manganese	0.2	0.044				
	o-Xylene	ND	0.33				Nickel	0.056	0.12				
	m, p-Xylenes	ND	0.85				Sodium	710	840]			
							Vanadium	0.055	0.16]			
							Zinc	0.058	0.058				
RW-8	Acetone	0.69	0.48	PCB-1242	ND	0.0011	Aluminum	0.22	2.9	110	370	10	11.4
(aqueous)	Benzene	0.32	0.42	PCB-1248	0.0039	ND	Antimony	ND	0.015	1			
	2-Butanone	0.5	0.54	PCB-1260	0.0085	0.0019	Arsenic	0.021	0.28	1			
	cis-1,2-Dichloroethene	ND	0.26				Barium	0.044	0.11				
	Ethylbenzene	0.078	0.12				Calcium	53	80]			
	4-Methyl-2-pentanone	0.22	0.65				Iron	0.27	1.2	1			
	Toluene	0.28	0.83				Lead	ND	0.03	1			
	Vinyl chloride	0.15	0.15				Magnesium	46	0.25]		1	
	o-Xylene	ND	0.25				Manganese	0.076	ND ND]			
	m, p-Xylenes	ND	0.63				Nickel	ND	0.2				

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.
 RW-1 is a dry well and was not sampled.

– Not analyzed.

ND = Not detected.



SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 5 of 10

													Page 3 of 10
WELL NO. (phase)	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA I	IETALS METHOD) ⁽	1)	HYDROC	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(priase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
RW-8							Sodium	550	950				
(aqueous)							Vanadium	0.017	0.05				
(Cont'd)							Zinc	0.04	0.035				
RW-9	Acetone	0.8	ND	PCB-1248	ND	0.051	Aluminum	0.36	0.79	85	22	9.9	10.7
(aqueous)	Benzene	0.54	ND	PCB-1260	ND	0.06	Antimony	0.031	0.016]			
	2-Butanone	0.26	ND				Arsenic	0.24	0.54				
	Ethylbenzene	0.073	ND				Barium	0.071	0.11				
	4-Methyl-2-pentanone	0.15	ND				Calcium	19	26				
	Toluene	0.6	1.6				Chromium, total	ND	0.018				
	Trichloroethene	0.042	ND				Cobalt	0.029	0.048]			
	Vinyl chloride	0.53	ND				Iron	0.6	1.7				
	o-Xylene	ND	1.1				Lead	0.02	0.16]			
	m, p-Xylenes	ND	2.6				Magnesium	4.3	0.37				
							Manganese	0.037	0.039				
							Nickel	0.15	0.29]			
							Sodium	520	710		:		
							Vanadium	0.06	0.14]			
							Zinc	0.04	0.099				
RW-10	Acetone	0.27	0.21		ND	ND	Aluminum	0.97	0.31	30	560	8.7	10
(aqueous)	Benzene	0.21	0.25				Antimony	0.023	0.016				
	2-Butanone	0.18	0.098				Arsenic	0.084	0.33				
	cis-1,2-Dichloroethene	ND	0.26				Barium	0.11	0.06				
	trans-1,2-Dichloroethene	ND	0.012				Calcium	46	110				
	Ethylbenzene	0.061	0.045				Chromium, total	ND	0.0086				
	4-Methyl-2-pentanone	0.067	0.079				Iron	1.3	0.69	<u> </u>			
	Toluene	0.32	0.23				Lead	0.051	0.012				
	Vinyl chloride	0.13	0.17				Magnesium	2.7	0.7			1	
	o-Xylene	ND	0.088				Manganese	0.062	0.02				
	m, p-Xylenes	ND	0.18				Nickel	0.088	0.064				

⁽¹⁾ Various EPA methods are used for the metal analysis.
(2) Pre-pumping analytical results.
(3) Post-pumping analytical results.

- = Not analyzed.

= Not detected.



⁽⁴⁾ RW-1 is a dry well and was not sampled.

SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 6 of 10	
PH	

WELL NO. (phase)		ORGANICS HOD 8260)		(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA I	IETALS METHOD) ⁽	1)	HYDROC (EPA MET	TROLEUM CARBONS HOD 418.1) om)	P	PH units)
(priase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
RW-10							Sodium	820	900				
(aqueous)							Vanadium	0.039	0.13				
(Cont'd)							Zinc	0.068	0.044	_			
PB-2	Benzene	0.29	ND	PCB-1248	ND	0.036	Aluminum	0.88	0.94	94	25	8.5	7.4
(aqueous)	Ethylbenzene	0.43	ND	PCB-1260	ND	0.067	Arsenic	0.1	0.082	_			
	Toluene	0.13	1.0				Barium	0.083	0.32				
	m, p-Xylenes	ND	2.3				Calcium	32	44				
							Chromium, total	ND	0.036				
		ļ					Cobalt	0.013	ND				
							Iron	1.4	3.8]	
							Lead	ND	0.064				
							Magnesium	4.1	8.3				
							Manganese	0.16	0.25				
L							Nickel	0.031	0.069]		į	
							Sodium	570	1,100]			
							Thallium	0.0074	ND	1			
							Vanadium	0.074	0.12	1			
							Zinc	0.064	0.096				
PB-2	Ethylbenzene	74			ND		Aluminum	5.8		_	-	-	-
(oil)							Calcium	84					ľ
							Iron	12		1			
ļ,			,				Magnesium	11		_			
							Sodium	730					
PB-4	Benzene	0.11	0.15	PCB-1248	ND	0.002	Aluminum	1.6	1.8	320	7.1	7.2	7
(aqueous)	2-Butanone	0.14	ND	PCB-1260	ND	0.0021	Arsenic	ND	0.038	1			
	Ethylbenzene	ND	0.088				Barium	ND	0.13				
	Toluene	ND	0.16				Calcium	290	330				
 	Vinyl Chloride	0.036	ND				Chromium, total	0.016	0.0094	}		}	
	o-Xylene	ND	0.14				Iron	5.1	20]			
[[m, p-Xylenes	ND	0.29	l			Lead	0.021	0.069				

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.
 RW-1 is a dry well and was not sampled.

^{- =} Not analyzed.

⁼ Not detected.

SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 7 of 10

													Page / of I
WELL NO. (phase)	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA I	IETALS METHOD) (1)	HYDROC (EPA METI	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(pnase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
PB-4							Magnesium	99	100				
(aqueous)							Manganese	0.48	1.1				
(Cont'd)							Nickel	ND	0.021]			1
							Selenium	0.008	0.0052				
							Sodium	1,200	1,200				
							Vanadium	0.029	0.025				
							Zinc	0.092	0.069]			
PB-6	Acetone	ND	0.033		ND	ND	Aluminum	7.6	0.18	32	38	8.1	9.7
(aqueous)	Benzene	0.017	0.042				Arsenic	0.066	0.053				
	2-Butanone	ND	0.011				Barium	0.26	0.096	1			
	cis-1,2-Dichloroethene	ND	0.035				Calcium	200	130				
	trans-1,2-Dichloroethene	0.0022	0.0047				Chromium, total	0.017	ND]			
	Ethylbenzene	0.0076	0.0072				Iron	11	0.32				
	4-Methyl-2-pentanone	ND	0.017				Lead	0.075	0.0094				
	Toluene	0.0032	0.19				Magnesium	18	7.1	1			
	Vinyl chloride	0.039	0.96				Manganese	0.25	0.036	1			
	o-Xylene	ND	0.0081				Nickel	0.024	0.019				
	m, p-Xylenes	ND	0.013				Sodium	770	810	1			
							Vanadium	0.045	0.038				
							Zinc	0.14	0.031				
PB-8	Acetone		0.5	PCB-1248		0.069	Aluminum	_	73		14	-	6.5
(aqueous)	Benzene	_	0.2	PCB-1260	-	0.12	Antimony	_	0.014	1			
	2-Butanone		0.42				Arsenic	-	0.29				
	cis-1,2-Dichloroethene	_	0.63				Barium		2.9]			
	Ethylbenzene	_	0.15				Beryllium	_	0.0023				
	4-Methyl-2-pentanone	_	0.23				Cadmium	_	0.023				
	Toluene	_	0.23				Calcium	_	150				
	Vinyl chloride	_	0.68				Chromium, total	-	0.41	1			
	o-Xylene	-	0.24				Cobalt	_	0.057	1			
	m, p-Xylenes	-	0.55				Iron	-	100				

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.
 RW-1 is a dry well and was not sampled.

– Not analyzed.

= Not detected.



SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 8 of 10

													Page 8 of 10
WELL NO. (phase)	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA N	IETALS METHOD) (1)	HYDROC	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(pilase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
PB-8							Lead	-	1.9				
(aqueous)							Magnesium		40]			
(Cont'd)							Manganese	-	6.2	}		\ \	
							Mercury	-	0.00021]			
							Nickel		0.24]			
							Selenium	_	0.026]	·		
							Sodium		680	İ			
							Vanadium		0.5	l			
							Zinc		1.8				
PB-8	Ethylbenzene	160	-	PCB-1248	32		Aluminum	490	-	-	_	-	_
(oil)	Toluene	81		PCB-1260	75		Arsenic	8					
			****			_	Barium	84]			
							Calcium	1,500	-]			
							Chromium, total	370			ļ		
							Cobalt	3.9					
							Iron	1,000					
							Lead	29		ļ	ţ	l	
							Magnesium	85	-				
							Manganese	55					
							Nickel	210]		
							Sodium	14	-				
							Vanadium	16					
	·						Zinc	35					
EX-2	Benzene	0.9	0.78	PCB-1248	0.0036	0.015	Aluminum	0.27	1.7	22,000	31	8.1	7.1
(aqueous)	cis-1,2-Dichloroethene	ND	0.85	PCB-1260	0.0057	0.02	Arsenic	0.12_	0.071	1]]	Ì
	Ethylbenzene	0.24	0.29				Barium	0.16	0.54	4			
	4-Methyl-2-pentanone	10	3.6			_	Calcium	18	52				
	Toluene	11	0.88				Chromium, total	0.04	0.14				
	Vinyl chloride	0.99	ND				Cobalt	0.011	0.01	<u> </u>	L	1	

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.

(4) RW-1 is a dry well and was not sampled.

Not analyzed.

ND = Not detected.



SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 9 of 10

													Page 9 of 1
WELL NO.	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA I	METALS METHOD) (1)	HYDROC	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(phase)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
EX-2	o-Xylene	ND	0.43				Iron	0.97	9.9				
(aqueous)	m, p-Xylenes	ND	0.87				Lead	0.025	0.08]			
(Cont'd)							Magnesium	3.4	11]			
							Manganese	0.13	0.69]			
							Nickel	0.1	0.17				
							Sodium	1,000	1,000				
							Vanadium	0.16	0.85]			
							Zinc	0.027	0.21				
EX-2	Benzene	100	160	PCB-1248	39	35	Calcium	32	-	-	_	-	
(oil)	cis-1,2-Dichloroethene	ND	75	PCB-1260	65	47	Iron	7.2	_				
	Ethylbenzene	210	440				Nickel	1.8	_				
	Toluene	410	570				Sodium	900					
	Trichloroethene	ND	33										
	o-Xylene	ND	650										
	m, p-Xylenes	ND	1,300										
EX-4	Acetone	ND	0.62		ND	ND	Aluminum	0.36	-	60	-	7.7	-
(aqueous)	Benzene	0.14	0.54				Arsenic	0.12					
	2-Butanone	ND	0.35				Barium	0.28					
	cis-1,2-Dichloroethene	ND	0.2				Calcium	56	_				
	Ethylbenzene	0.042	0.1				Chromium, total	0.026	_				
	4-Methyl-2-Pentanone	ND	0.14				Iron	6.1	_				
	Tetrachloroethene	ND	0.011				Magnesium	11					
	Toluene	0.046	0.47				Manganese	1.5		1			
	Trichloroethene	0.034	0.015				Nickel	0.034	_				
	Vinyl chloride	0.034	0.15				Sodium	800	_		1		
	o-Xylene	ND	0.18				Vanadium	0.22	-	1			
	m, p-Xylenes	ND	0.42				Zinc	0.045		1		L	
TT-II-1	Acetone	5.4	2.1	Ì	ND	ND	Aluminum	0.43	1.9	98	8.9	9.0	11.4
(aqueous)	Benzene	1.4	1.8				Antimony	ND_	0.019				
	2-Butanone	20	8.3				Arsenic	0.2	0.11				

Various EPA methods are used for the metal analysis.
 Pre-pumping analytical results.
 Post-pumping analytical results.
 RW-1 is a dry well and was not sampled.

– Not analyzed.

= Not detected.



SUMMARY OF TM NO. 13 DETECTED ANALYTICAL RESULTS OF EXTRACTION WELLS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 10 of 10

WELL NO. (phase)	VOLATILE ((EPA METI			(EPA ME	PCBs ETHODS 35	10/8082)	M (EPA I	IETALS METHOD) ⁽	1)	HYDROC (EPA MET	TROLEUM CARBONS HOD 418.1) om)	P	H units)
(priasc)	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	Constituent (ppm)	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾	4/30/99 ⁽²⁾	6/10/99 ⁽³⁾
TT-II-1	cis-1,2-Dichloroethene	ND	2.8				Barium	0.15	0.24				
(aqueous)	4-Methyl-2-pentanone	25	11				Calcium	35	130				
(Cont'd)	Toluene	3.6	4.0				Cobalt	0.012	0.02				
	Trichloroethene	ND	2.2				Iron	0.47	0.44]			
	o-Xylene	ND	0.41				Lead	ND	0.0096				
	m, p-Xylenes	ND	0.99				Magnesium	0.99	0.058			}	
							Manganese	0.073	ND			Ì	
							Nickel	0.2	0.41			İ	
							Selenium	ND	0.0053				
1	,						Sodium	1,000	1,100				
							Vanadium	0.23	0.023			1	1
							Zinc	0.038	0.028				
TT-II-2	Benzene	0.0081	0.11		ND	ND	Aluminum	3.9	0.15	24	11	7.7	7.2
(aqueous)	2-Butanone	ND	0.035				Antimony	ND	0.011				
	cis-1,2-Dichloroethene	ND	0.0094				Arsenic	0.095	0.14	Į		į	
	Ethylbenzene	0.0042	0.016				Barium	0.48	0.39	1		İ	
1	4-Methyl-2-pentanone	ND	0.033				Calcium_	130	210]			
	Toluene	ND	0.017				Chromium, total		0.011				
	Vinyl chloride	ND	0.008				Iron	6.8	4.2	_			
	o-Xylene	ND	0.0098				Lead	ND_	0.011	1			
	m, p-Xylenes	ND	0.017				Magnesium	23	35				
							Manganese	6.8	5.2				
							Mercury	0.0016	ND				
							Nickel	0.023	0.02	1			
							Selenium	ND	0.0092	1	}	}	
							Sodium	520	500				
Ì							Vanadium	0.056	0.058				
							Zinc	0.056	0.043				

94-256/Rpts/RD (Rev. 2.0) (5/4/01/mc)

(1) Various EPA methods are used for the metal analysis.
 (2) Pre-pumping analytical results.
 (3) Post-pumping analytical results.

(4) RW-1 is a dry well and was not sampled.

- = Not analyzed.

= Not detected.



TABLE 4.11

RESERVOIR LIQUID LEVELS NEAR PHASE II TEST TRENCH LOCATIONS WASTE DISPOSAL, INC. SUPERFUND SITE

MONITORING LOCATIONS ⁽¹⁾	MONITOR	ING DATE AN	D DEPTH TO	LIQUIDS ⁽¹⁾
LOCATIONS	9/1/98	9/2/98	9/4/98	9/18/98
Test Trench II-1 Area				
• PII-1A	9.5	13.14	12.75	12.76
• EX-2		12.40		10.63
• VW-09				8.33
• P-1				7.64
• P-2		4.39		4.88
Test Trench II-2 Area				
• PII-2A		9.5	13.33	10.32
• NDP-1	-	5.99	5.60	6.15
• NSP-1				6.34
• NDP-2		4.81	4.80	6.54
• NSP-2				6.16

94-256/Rpts/RcDelnSuRe Rev. 1 (8/4/99/ey)

⁻⁻⁻ Not measured
(1) See Figure 1 for monitoring locations.

TABLE 4.12

PAINT FILTER TEST RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE

DATE SAMPLED	SAMPLE INTERVAL (feet)	VOLUME OF SAMPLE COLLECTED (mL)	TEST START TIME (hh:mm)	TEST FINISH TIME (hh:mm)	TEST RESULTS ⁽¹⁾ (ml)
Test Trench II-1					_
9/1/98	0 to 2	100	11:39	11:44	0
	2 to 5	100	11:55	12:00	0
	5 to 8	100	14:03	14:08	0
	8 to 10	100	14:10	14:15	0
	11 to 12	100	14:25	14:30	0
	12 to 14	100	15:20	15:25	0
Test Trench II-2	- · · · · · · · · · · · · · · · · · · ·				
9/2/98	0 to 5	100	09:37	09:42	0
	5 to 10	100	09:52	09:57	0
	10 to 12	100	10:17	10:22	0
Test Trench II-3					
9/3/98	0 to 5	100	11:05	11:10	0
	5 to 10	100	11:13	11:18	0
	10 to 15	100	11:30	11:35	0

94-256/Rpts/ReDeInSuRe Rev. 1 (8/4/99/ey)

Note: Testing was performed following EPA Method 9095.



⁽¹⁾ Volume of liquids collected in graduated cylinder.

VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

																												Page 1 of 9
	SOIL GAS										WELL			N AND AN				bv, unless	noted)									
PARAMETERS	THRESHOLD												WDI-VA	APOR WEL	LL - PRO	BE DEPT	H (feet)											
	LIMIT (ppbv)	01-35	Qual	02-35	Qual	03-35	Qual	04-23	Qual	05-29	Qual	06-34	Qual	08-35	Qual	10-35	Qual	11-35	Qual	12-34	Qual	13-31	Qual	14-35	Qual	16-34	Qual 17-	-35 Qual
Nonmethane Organics as methane (ppmv)		100		1,200		130	İ	13,000		91		390		100		160		170		62		200		550		32	53	3
Methane(ppmv)	12,500°°	0.92	U'21	33,000		14,000	Ì	130,000		12,000		53,000	I	8,600		5,600		18,000		1.2	U(2)	13,000	1	7,200		< 0.50	U <0	.50 U
Vinyl chloride	25	<1.6	U	<3.9	υ	<3.9	U	<390	U	<1.6	υ	55	1	4.6		150		7.1		< 0.39	υ	29		370	!	<1.6	U ; <2	2.0 U
Chloroethane	75,200	<1.5	U	<3.8	ιυ	<3.8	lυ	<380	U	<1.5	υ	<15	U	<1.5	U	<1.5	U	<1.9	υ	< 0.38	Ü	<3.8	U	24	1	<1.5	U <1	.9 U
Acetone	31,200	<1.7	υ	<4.2	U	33	j	<420	υ	<1.7	υ	<17	U	1.1	J	<1.7	U	<2.1	υ	9.9	U'21	<4.2	U	<17	U	2.4	8	.3
trans-1,2-Dichloroethene	3,680	<1.0	U	<2.5	U	<2.5	. U	; <250	ı U	<1.0	U	<10	, U	<1.0	, U ,	<1.0	Ui	<1.3	υ	< 0.25	; U	, 8.7		<10	. U	<1.0	U ; <1	.3 U
1,1-Dichloroethane	25,600	< 0.99	U	<2.5	υ	<2.5	υ	<250	' U :	< 0.99	U	<9.9	· U	<0.99	, υ	75	Ţ	1.1	j	< 0.25	, U	<2.5	U	95		0.9	J <1	.2 U
cis-1,2-Dichloroethene	1,860	<1.0	U	<2.5	: U	<2.5	U	460	!	0.85	J	<10	: υ	<1.0	·υ	83		2.0		< 0.25	υ	50	:	41	1	<1.0	U <1	.3 U
Chloroform	340	< 0.82	U	<2.0	Ū	<2.0	, U	. <200	U	< 0.82	U	<8.2	U	< 0.82	; U i	<0.82	⊢ U '	<1.0	U	< 0.20	U	<2.0	υ	<8.2	U	1.2	. <1	.0 U
1,2-Dichloroethane	360	< 0.99	U	<2.5	υ	<2.5	U	<250	U	< 0.99	∤ U	<9.9	· U	< 0.99	l U	< 0.99	U	<1.2	U	< 0.25	U	<2.5	U	22	!	<0.99	U <1.	2 ∤ U
1,1,1-Trichloroethane	36,800	< 0.73	υ	<1.8	: บ :	<1.8	: U	<180	U	< 0.73	U	<7.3	υ	< 0.73	: U '	< 0.73	U :	< 0.93	υ	< 0.18	υ	<1.8	U	<7.3	U	6.2	U ⁽²⁾ + 24	10
Benzene	200	<1.3	! U	<3.1	υ	15	į	830	į į	<1.3	U	<13	i U	0.79	l J i	1.0	j	1.5	į j	< 0.31	U	2.6	J	37	1	<1.3	U 6.0	.6
Carbon Tetrachloride	68	<0.64	U i	<1.6	U	<1.6	υ	<160	່ U	<0.64	U	<6.4	υ	< 0.64	U	<0.64	U	< 0.80	U	<0.16	U	<1.6	U	<6.4	Ü	<0.64	U <0.3	.80 U
1,2-Dichloropropane	186	< 0.87	U	<2.2	U	<2.2	Ù	<220	U	< 0.87	U	<8.7	U	< 0.87	U	<0.87	U	<1.1	U	<0.22	U	<2.2	U	140	1 1	< 0.87	U <1.	al i
Trichloroethene	822	<0.74	. U i	<1.9	<u>i u !</u>	<1.9	! U	<190	U	2.6	U'2)	<7.4	. U	< 0.74	υ !	<0.74	υ	8.0	!	1.3		62	1	- 11	U'2)	91	1 14	4
1,1,2-Trichloroethane	440	< 0.73	U	<1.8	i U	<1.8	U	<180	υ	< 0.73	U	<7.3	· U	< 0.73	υ	< 0.73	U	< 0.93	U	<0.18	U	<1.8	U	<7.3	υ	< 0.73	U <0.	.93 j U
Toluene	21,200	0.91	U ⁽²⁾	<2.7	υ	5.0	1	<270	U	<1.1	υ	<11	U	0.92	U'21	1.3		1.3		1.6	U'2)	<2.7	υ	13	1	1.1	1 33	3
1,2-Dibromoethane	6	<0.52	U	<1.3	υ	<1.3	. U	<130	· U	< 0.52	U	<5.2	U	< 0.52	U	< 0.52	U	<0.66	U	< 0.13	U	<1.3	U	<5.2	U	< 0.52	U ; <0.0	.66 U
Tetrachloroethene	1,064	7.8	U	<1.5	U	7.7		<150	U	17		<5.9	υ	1.6	1 ;	0.82	U(2)	34	1 1	38	i	<1.5	U	20		1.9	U ⁽²⁾ 19	9
Ethylbenzene	49,000	<0.92	U	<2.3	U	4.1	1	<230	U	<0.92	U	<9.2	U	<0.92	U	< 0.92	l u	<1.2	U :	0.26	U'2)	<2.3	υ !	230	;	< 0.92	U ! 9.2	2
m- & p-Xylenes	14,280	<0.92	U	1.5	J	4.3		<230	υ	<0.92	U	<9.2	υ	<0.92	U	<0.92	U	<1.2	υ	0.76	U'2)	<2.3	ı U	620	! !	<0.92	U 34	4
o-Xylene	14,280	<0.92	υ	<2.3	υ	1.8	J	<230	υ	<0.92	U	<9.2	U	<0.92	ו ט	<0.92	U	<1.2	U	0.24	U ⁽²⁾	<2.3	l U	60		<0.92	U 14	4

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

ppmv = parts per million by volume.

ppbv = parts per billion by volume.

Bold Numbers = Concentrations above threshold limits.

⁽²⁾ Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

⁽³⁾ Well not sampled this quarter.

⁽⁴⁾ The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

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U = analyte not detected.

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VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

											WELL	IDD INTER	CATION	1 1 1 1 1 1 1 1	LA LAZZIO	AL DECL	U TC /	 	. 1	_								Page 2 of 9
DADAMETERS	SOIL GAS THRESHOLD										WELL	IDENTIFI		POR WEL				bv, unless	noted)	_								
PARAMETERS	LIMIT (ppbv)	18-36	Qual	20-35	Qual	21-36	Qual	22-35	Qual	23-36	Qual		Qual	25-35		26-35		27-09	Qual	27-19	Qual	27-35	Qual	28-10	Qual	28-25	Qual	29-10 Qual
Nonmethane Organics as methane (ppmv)		11,000		80		110		75	:	170		91		12,000		63		(3)		6.0		95		(3)		(3)		18
Methane (ppmv)	12,500°°	9.6		< 0.50	U	4.6		0.84	i	4,200		<0.50	υ	507,000		0.89	U'21			1.8	:	< 0.50	U					1.2
Vinyl chloride	25	<390	U	<1.6	U	<2.0	U	<7.8	υ	35		<0.39	U	<200	υ	< 0.39	U		1	<1.6	U	<1.6	U	!	-		i	<1.6 U
Chloroethane	75,200	<380	U	<1.5	U	<1.9	Lυ	<7.6	! U	< 0.38	υ	<0.38	υ	<190	U	< 0.38	U			<1.5	υ	<1.5	υ				i i	<1.5 U
Acetone	31,200	<420	U	5.5		<2.1	lυ	<8.4	U	100	i	3.2	U ⁽²⁾	<210	υ	2.2	U'2)		i	40		9.5	İ		:			6.7
trans-1,2-Dichloroethene	3,680	<250	U	<1.0	_ U →	<1.3	U	<5.0	υ	45	!	<0.25	U	<130	! U ;	0.97				<1.0	U	<1.0	υ		j		. 1	<1.0 U
1,1-Dichloroethane	25,600	<250	ı U	< 0.99	U	<1.2	L U	<4.9	· U	20		<0.25	U	<120	U	3.3	i		!	<0.99	υ	<0.99	U	1	1 !		1	<0.99 U
cis-1,2-Dichloroethene	1,860	<250	U	<1.0	U	1.4		<5.0	U	130		<0.25	U	<130	υ	110				<1.0	U	<1.0	υ	i	: !			<1.0 U
Chloroform	340	<210	i U	< 0.82	i U i	1.8		5.0		1.2	i	0.42		<100	: U :	0.86	<u> </u>		i !	<0.82	U	<0.82	U	<u> </u>				2.0
1,2-Dichloroethane	360	<250	U	< 0.99	: U	<1.2	υ	<4.9	: U	< 0.25	υ ;	< 0.25	U	<120	U	< 0.25	U			<0.99	U	< 0.99	U		:		. 1	<0.99 U
1,1,1-Trichloroethane	36,800	<190	U	< 0.73	· U	1.7		7.6	U'21	0.91	. !	0.17	j	<92	U	0.89	i i		<u> </u>	21		< 0.73	U_			·	. !	20
Benzene	200	1,600		<1.3	U	<1.6	U	<6.3	U	1.1		0.39		220		< 0.31	U			1.0	J	<1.3	i U		į			1.3
Carbon Tetrachloride	68	<160	U	< 0.64	U	< 0.80	U	<3.2	U	<0.16	: U i	<0.16	U	<80	: U !	< 0.16	l U i			<0.64	U	< 0.64	U					<0.64 U
1,2-Dichloropropane	186	<220	U	< 0.87	U	<1.1	U	<4.3	U	<0.22	! บ !	<0.22	U	<110	υ	< 0.22	U		'	<0.87	U	<0.87	υ					<0.87 + U
Trichloroethene	822	<190	U	3.9	U(2)	420	į l	1,400	1	910	1	6.6		<93	υ	83	1		!!	< 0.74	บ	< 0.74	υ				1_	<0.74 U
1,1,2-Trichloroethane	440	<190	U	<0.73	υ !	< 0.93	U	<3.7	U	<0.18	υ	<0.18	U	<92	υ	< 0.18	υ		ii	<0.73	υ	<0.73	υ					<0.73 U
Toluene	21,200	530		1.3	!	1.1	J	<5.3	υ	1.2	U'2'	1.4	U ⁽²⁾	4,700	1	0.56	! !			4.3		2.3						7.4
1,2-Dibromoethane	6	<130	j U l	<0.52	U i	< 0.66	L U	<2.6	U	< 0.13	! U	< 0.13	U	<65	U	< 0.13	U ¦		:	<0.52	U	<0.52	U	!				<0.52 U
Tetrachloroethene	1,064	<150	υ	150	i	18	<u> </u>	130		22		7.3		<74	U	19	-		! !	0.79		1.0			i			1.2
Ethylbenzene	49,000	<230	υ	<0.92	U	<1.2	U	<4.6	U	0.21	[U ⁽²⁾]	0.31	U'2)	610		< 0.23	U			0.79	3	<0.92	U				;	1.2
m- & p-Xylenes	14,280	350	U	0.7	J i	<1.2	i U	<4.6	U	0.66	U(2)	1.2	U ⁽²⁾	1,800	1	0.33	U'2)		!	3.2		1.9	!					5.2
o-Xylene	14,280	<230	U	< 0.92	! U	<1.2	U	<4.6	υ	0.53	U'2)	0.41	U'2'	550	1 1	< 0.23	U		i I	0.93	!	< 0.92	U		!			1.2

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

ppmv = parts per million by volume.

ppbv = parts per billion by volume.

Bold Numbers = Concentrations above threshold limits.

⁽²⁾ Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

⁽³⁾ Well not sampled this quarter.

⁽⁴⁾ The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

⁽⁵⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

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VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page	3	of	9
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	SOIL GAS										WELL	IDENTIF	ICATION	AND AN	ALYTIC	AL RESU	LTS (pp	bv, unless r	noted)									
PARAMETERS	THRESHOLD												WDI-VA	POR WEL	L - PROI	BE DEPT	H (feet)											
	LIMIT (ppbv)	29-23	Qual	29-35	Qual	30-07	Qual	30-23	Qual	30-35	Qual	31-10	Qual	31-30	Qual	32-08	Qual	32-18	Qual	32-35	Qual	33-10	Qual	33-35	Qual	34-10	Qual	34-23 Qual
Nonmethane Organics as methane (ppmv)		44		64	M. M	29		170		220		19		59		18		50		67		40		89		31		110
Methane (ppmv)	12,50011	<0.50	U	< 0.50	U	4.8		9,200		11,000	i i	0.73	U(2)	0.72	U'2)	1.1	U ⁽²⁾	< 0.50	υ	<0.50	υ	1.0	U'2)	2.0	U'2'	2.4		0.77
Vinyl chloride	25	<1.6	U	<1.6	U	<1.6	υ	<3.9	U	5.5	i I	< 0.39	; U	< 0.39	U	<2.0	U	< 0.39	U	< 0.39	U	< 0.39	U	< 0.39	U	<1.6	U	<1.6 U
Chloroethane	75,200	<1.5	υ	<1.5	U	<1.5	υ	<3.8	U	<3.8	U	< 0.38	U	< 0.38	U	<1.9	U	<0.38	U	< 0.38	U	< 0.38	U	< 0.38	U	<1.5	U	<1.5 U
Acetone	31,200	3.6	!	19	1 1	2.8	! ;	<4.2	U	<4.2	U	6.1	: U ⁽²⁾	4.5	U'2)	8.0	U'21	7.0	U ⁽²⁾	15	U ⁽²⁾	1.8	U'2	8.4	U(2)	3.7	:	3.1
trans-1,2-Dichloroethene	3,680	<1.0	U	<1.0	l U l	<1.0	U	5.5	ĺ	26	i į	<0.25	l U l	< 0.25	U	<1.3	U	<0.25	U	<0.25	U	< 0.25	U	0.44		<1.0	U	<1.0 U
1,1-Dichloroethane	25,600	<0.99	U	<().99	l U i	0.71)	<2.5	U	<2.5	U	<0.25	·υ	0.56	i	1.6		0.65		<0.25	υl	0.37	i	1.2		<0.99 i	U	<0.99 U
cis-1,2-Dichloroethene	1,860	<1.0	Ü	<1.0	l u l	<1.0	l U	6.9		34		< 0.25	U	< 0.25	U	<1.3	U	< 0.25	U	0.57		< 0.25	U	2.0		<1.0	U,	<1.0 U
Chloroform	340	< 0.82	U	4.4	į !	1.4	!	<2.0	U	<2.0	U	2.8		0.69		3.6		3.7		2.9	i	16	į	9.0	- 1	1.2		0.58 J
1,2-Dichloroethane	360	<0.99	U	< 0.99	U	<1.0	l U	<2.5	U	<2.5	U	0.36	i :	0.37		3.4		4.4		1.0	. !	4.6	!	0.17	3	<0.99	U	<0.99 U
1,1,1-Trichloroethane	36,800	<0.73	U .	0.65	j]	590		9.8		4.9	i (67		8.4		28	1	10	:	3.9	i	160	!	20	i	440	ı	15
Benzene	200	<1.3	U	<1.3	U	<1.3	U	<3.1	U	<3.1	U	< 0.31	U	0.22	J !	<1.6	υ	< 0.31	U !	0.19	j	<0.31	U	1.1	!	<1.3	υ	<1.3 U
Carbon Tetrachloride	68	< 0.64	U	<0.64	lυi	<0.64	U	<1.6	υl	<1.6	U	<0.16	υ	<0.16	U	< 0.80	U	< 0.16	U	< 0.16	U !	<0.16	U	< 0.16	U !	< 0.64	U	<0.64 U
1,2-Dichloropropane	186	<0.87	υ '	<0.87	U	<0.87	U	<2.2	U	<2.2	U	<0.22	l u ;	<0.22	<u> U </u>	<1.1	υ	<0.22	U	<0.22	U	<0.22	Ui	<0.22	U	<0.87	U I	<0.87 U
Trichloroethene	822	< 0.74	U	0.57	j	0.69	. ј ;	32		76		0.45	<u> </u>	7.8	: [< 0.93	ย	0.55		1.2	- 1	1.2		420		0.54	J	<0.74 : U
1,1,2-Trichloroethane	440	<0.73	U	< 0.73	U	< 0.73	i U	<1.8	U_	<1.8	U	<0.18	U	<0.18	U	< 0.92	U !	<0.18	U	<0.18	υ¦	<0.18	U	<0.18	U	<0.73	U	<0.73 U_
Toluene	21,200	7.8	1	9.0	<u> </u>	2.4	1	2.7 i	1	4.0	1	0.82	U	0.56	U(2)	<1.3	U .	0.38	U'21	0.76	U'21	0.94	U'2	1.1	U'21	4.2		3.3
1,2-Dibromoethane	6	<0.52	U ;	< 0.52	U	<0.52	U	<1.3	U	<1.3	U	<0.13	U	< 0.13	U	< 0.65	U ;	<0.13	U	< 0.13	U	< 0.13	U	< 0.13	U	<0.52	U	<0.52 U
Tetrachloroethene	1,064	6.7		13	!	1.7		32		46		17	1	39		1.5		1.5	i	1.3	,	0.87		18		2.2	i	9.0
Ethylbenzene	49,000	0.68	1	<0.92	U	< 0.92	U	<2.3	υj	<2.3	U	<0.23	υ!	< 0.23	U	<1.2	υ	< 0.23	υ	<0.23	υ	0.15	U'2)	< 0.23	U .	0.83	J	<0.92 U
m- & p-Xylenes	14,280	2.9		1.8		1.6		2.1	J	2.3	j	0.43	U'21	0.35	U'2)	<1.2	U	0.25	U'2)	0.46	U'21	0.57	U'21	0.25	U'21	3.4	- 1	2.4
o-Xylene	14,280	0.66	J	< 0.92	U	< 0.92	U !	<2.3	U	<2.3	υ	< 0.23	U	0.50	U'21	<1.2	υ	<0.23	υ	0.16	U ⁽²⁾	0.22	U ⁽²⁾	<0.23	U	0.85	J	<0.92 U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

ppmv = parts per million by volume.

ppbv = parts per billion by volume.

Bold Numbers = Concentrations above threshold limits.

⁽²⁾ Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

⁽³⁾ Well not sampled this quarter.

⁽⁴⁾ The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

⁽⁵⁾ Duplicates may not have been performed on the same sample for each analysis.

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VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 4 of 9

	SOIL GAS												WELL	IDENTIF	CATION	AND AN	ALYTIC	AL RESU	LTS (pp	bv, unless	noted)									··
PARAMETERS	THRESHOLD														WDI-VA	POR WEL	L - PROI	BE DEPT	H (feet)											
	LIMIT (ppbv)	34-40	0 , Q	ual	35-10	Qual	35-3	8	Qual	36-10	Qual	36-30	Qual	37-10	Qual	37-30	Qual	38-10	Qual	38-34	Qual	39-07	¹ Qual	39-30	Qual	40-10	Qual	40-25	Qual	41-07 Qua
Nonmethane Organics as methane (ppmv)		85			25		85	1		16		70		22		75		21		360		25	!	57		56	<u> </u>	74		2.1 U ¹²
Methane (ppmv)	12,5001	1.2	1		2.9	U'2)	5.3	-	U'2)	2.8	U(2)	< 0.50	υ	2.6		< 0.50	U	21	1	79		2.5		0.59		8,200		<0.50	U	3.4 U ¹²
Vinyl chloride	25	<1.6	+ 1	J	<3.9	U	<26		U	< 0.39	U	< 0.69	U	<1.6	υ	<1.6	U	<1.6	υ	<16	υ	<1.6	!	<1.6	υ	<1.6	U	<3.9	U_I	<1.6 U
Chloroethane	75,200	<1.5	_ _	J	<3.8	i U	<25		υ	< 0.38	υ	< 0.67	U	<1.5	U	<1.5	U	<1.5	υ	<15	υ	<1.5	U	<1.5	U	<1.5	U	<3.8	U	<1.5 U
Acetone	31,200	4.2	1	<u> </u>	11	U(2)	. 46	1	U(2)	36	U ⁽²⁾	14	U(2)	9.6	1	7.7	! :	Н	1 1	100	i 1	9.6	!	1.6	i j	3.4	!	<4.2	U	42
trans-1,2-Dichloroethene	3,680	<1.0	· [J !	<2.5	U	i <17	i	U	<0.25	U	< 0.45	U	<1.0	l U	<1.0	U	<1.0	υ	<10	U	<1.0	U	<1.0	!U	<1.0	U	<2.5	U	<1.0 U
1,1-Dichloroethane	25,600	< 0.99) · (J	<2.5	U	: <17	,	U	< 0.25	U	< 0.44	l U	1.3	1	<1.00	U	< 0.99	U	<9.9	l U i	3.8		<1.00	l U	< 0.99	υ	<2.5	U	<0.99 U
cis-1,2-Dichloroethene	1,860	<1.0		J	<2.5	U	<17	- 1	U	< 0.25	υ	< 0.45	<u>. u .</u>	<1.0	U	<1.0	ι υ 🗆	<1.0	<u>'</u> U '	<10	U	<1.0	U	<1.0	U	<1.0	. U	<2.5	U i	<1.0 U
Chloroform	340	1.8		i	6.4	İ	41	i	·	7.8		4.2	<u> </u>	1.1	!	<0.83	U	1.2	l I	<8.2	U	1.3	:	1.1	1	2.9	i i	<2.0	U	1.1
1,2-Dichloroethane	360	<0.99	1	J ;	1.6	J	<17		U :	1.3		1.2		<1.0	υ	<1.00	U	<0.99	U	<9.9	l u	<1.00	U	1.5	<u>.</u>	2.0		<2.5	U	<0.99 U
1,1,1-Trichloroethane	36,800	9.0		- 1	260	İ	16	- 1	i	20	<u>i</u>	1.1	!	2,900		41	1	220		69	i	3,700		160	<u> </u>	14	<u> </u>	2.1		67
Benzene	200	<1.3	· •	<u> </u>	<3.1	່ ບ	<21	1.	U	0.61	U ⁽²⁾	< 0.55	U	9.3	<u>; </u>	<1.3	U	<1.3	U	<13	U	2.6		<1.3	υ	12		<3.1	U	<1.3 U
Carbon Tetrachloride	68	<0.64	i j	J 📗	<1.6	ļυ	<11	1	U į	0.13	U ⁽²⁾	<0.28	U	<0.64	U	< 0.64	U '	< 0.64	U	<6.4	U	< 0.64	: υ '	<0.64	υ	< 0.64	U	<1.6	U	<0.64 U
1,2-Dichloropropane	186	< 0.87	' . l	J i	<2.2	U	<15	<u></u>	U	<0.22	U	<0.38	υ	<0.87	U	< 0.87	υ .	<0.87	U	<8.7	U	<0.87	U	< 0.87	U :	< 0.87	U :	<2.2	U	<0.87 + U
Trichloroethene	822	5.6	i i		44		1,600) <u>i</u>		0.29	U ⁽²⁾	< 0.33	υ	0.98	<u> </u> i	0.89	!	0.69	J	<7.4	U	2.6		<0.75	U	<0.74	U	5.5	į	<0.74 U
1,1,2-Trichloroethane	440	< 0.73	· t	J	<1.9	i U	: <12		U ;	< 0.19	U	< 0.33	υ	<0.74	υ	< 0.74	U	< 0.73	U	<7.3	υ	< 0.74	U	<0.74	U	< 0.73	υ	<1.8	U	<0.73 U
Toluene	21,200	3.4		- !	<2.7	U	<18		υ	2.6	U'21	1.9	U ⁽²⁾	1.8		1.2		1.5		<11	υ	1.9	'	0.77	J	2.5	l .	0.23	J	0.72 U'21
1,2-Dibromoethane	6	< 0.52	(J .	<1.3	! 0	<8.8	1	U	< 0.13	U	< 0.23	U	< 0.53	U	< 0.53	l U .	< 0.52	U	<5.2	υ	< 0.53	U	< 0.53	υ	< 0.52	U	<1.3	U	<0.52 U
Tetrachloroethene	1,064	5.9	ï		6.6	1 U(2)	16		1	1.3	U ⁽²⁾	5.6	U'21	0.57	j	1.9	i i	1.3		<5.9	υ	4.2		10		1.7		130		32
Ethylbenzene	49,000	0.66	· j	, ,	<2.3	U	<15		U	0.27	U ⁽²⁾	< 0.40	υ	1.0		< 0.92	U :	0.69	J	<9.2	U	< 0.92	υ	<0.92	U	0.75	J	<2.3	U	0.73 J
m- & p-Xylenes	14,280	2.7		- 1	<2.3	į U	<15	j	U I	_1.1	U'2)	0.89	U'21	4.8		1.0		2.7		<9.2	υl	1.5		1.1		2.7		1.8	J	2.7 U ⁽²⁾
o-Xylene	14,280	0.61	<u> </u>		<2.3	lυ	<15	:	U :	1.2	U'21	0.25	U'2'	0.77	J	< 0.92	υ	< 0.92	U	<9.2	U	<0.92	U	< 0.92	U	0.76	J	<2.3	υl	<0.92 U

ppmv = parts per million by volume.

ppbv = parts per billion by volume. **Bold Numbers** = Concentrations above threshold limits.

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.
(2) Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

⁽³⁾ Well not sampled this quarter.

⁽⁴⁾ The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

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VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page	5	of	9

	SOIL GAS										WELL	IDENTIF	CATION	AND AN	ALYTIC	AL RESU	JLTS (pp	bv, unless	noted)								
PARAMETERS	THRESHOLD												WDI-VA	POR WEI	.L - PRO	BE DEPT	H (feet)										
	LIMIT (ppbv)	41-20	Qual	42-10	Qual	42-30	Qual	43-09	Qual	43-19	Qual	43-32	Qual	44-07	Qual	44-16	Qual	44-30	Qual	45-12	Qual	45-22	Qual	45-30	Qual	46-07	Qual 46-15 Qual
Nonmethane Organics as		57	1	(3)		(3)	!	(3)	1 1	150		380		78	i	47	1	140		(3)		11,000		2.000		(3)	84
methane (ppmv)				157		47	1	, ,,,				500			1.				<u> </u>	(-,)	<u> </u>	11,000		2,000		(2)	
Methane (ppmv)	12,500 th	< 0.50	U				1			7,300	<u>l</u>	24,000		27	1	1,600		5,700]			61,000	J ⁺⁺	32,000	!		<0.50 U
Vinyl chloride	25	<1.6	i U 1				1		1	120		220	i	<3.9	υ	12		50]			380		<49	U		<1.6 U
Chloroethane	75,200	<1.5			<u> </u>		1	L		<3.8	U	<15	U	<3.8	U	<1.5	U	<3.8	υ			<190	U	<48	U		<1.5 U
Acetone	31,200	2.8	U ⁽²⁾		1 :		1	!	1 !	<4.2	! U	<17	! U	100	! U'21 1	14	U(2)	<4.2	l U		ŀ	<210	U	100	1		2.1
trans-1,2-Dichloroethene	3,680	<1.0	U		1		1		l [<2.5	υ	7.2	J	<2.5	1 0 1	<1.0	U	<2.5	ַ ַ ַ ַ ַ ַ			<130	U	<32	U		<1.0 U
1,1-Dichloroethane	25,600	<0.99	U		:		1	!		<2.5	U	<9.9	U_	4.0		6.7	1 1	42	!		1	<120	υ	<31	υl		5.8
cis-1,2-Dichloroethene	1,860	<1.0	U				}			28		170		<2.5	U	<1.0	U	<2.5	i U		i	1,400		<32	U		<1.0 U
Chloroform	340	< 0.82	υ							1.9	[J]	<8.2	U	6.4		- 11	1	<2.1	U			<100	U	<26	U !		1.9
1,2-Dichloroethane	360	< 0.99	U		<u> </u>					<2.5	U	<9.9	υ	<2.5	U	1.3	i i	<2.5	U			<120	U	<31	U		2.1
1,1,1-Trichloroethane	36,800	35					1		1	7.3		<7.3	U	250	1	97		58				<93	U	<23	U		99
Benzene	200	<1.3	U		1		1		! !	<3.1	U	14		<3.1	υ	1	U(2)	<3.1	U			570		380			<1.3 U
Carbon Tetrachloride	68	< 0.64	U		i		1		<u>i</u>	<1.6	U	<6.4	U	<1.6	U	< 0.64	U	<1.6	U			<80	U	<20	υ		<0.64 U
1,2-Dichloropropane	186	< 0.87	υ				1			<2.2	U	<8.7	U	<2.2	U	1.1	!	38				<110	U	<27	U		⊢<0.87 U
Trichloroethene	822	< 0.74	υ		;		i			6.2	U'2)	<7.4	υl	14	1	< 0.75	U	<1.9	U			530		17	J		15
1,1,2-Trichloroethane	440	< 0.73	U							<1.8	U	<7.3	U	<1.9	U	<0.74	υ	<1.9	U			<93	U	<23	U		<0.73 U
Toluene	21,200	<1.1	υ				1 :			6.8	U'21	<11	υ	<2.7	U	3.1	U(2)	<2.7	U .		1	100	J	47			1.7
1,2-Dibromoethane	6	< 0.52	U :		1		i '		1	<1.3	U	<5.2	υ	<1.3	U	< 0.53	U ·	<1.3	υ		i	<66	υ	<16	υ		<0.52 U
Tetrachloroethene	1,064	18	İ		1		i			7.7	1	<5.9	U	23		1.7	U'2)	<1.5	U			<75	U	<19	υ		130
Ethylbenzene	49,000	< 0.92	U							3.7		<9.2	U	<2.3	U	< 0.92	iυ;	<2.3	υ			230	1	.39	i		<0.92 U
m- & p-Xylenes	14,280	< 0.92	U							12		8.8	J	<2.3	U	1.1	U'21	<2.3	U	-		<120	υ	110			1,9
o-Xylene	14,280	< 0.92	U		1		1			2.7		<9.2	U	<2.3	T U	<0.92	U	<2.3	U			<120	U	88			<0.92 U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

⁽³⁾ Well not sampled this quarter.

⁽⁴⁾ The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

⁽⁵⁾ Duplicates may not have been performed on the same sample for each analysis.

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J = analyte detected below reporting detection limit.

ppmv = parts per million by volume.

ppbv = parts per billion by volume.

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VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 6 of 9

<4.6 U <4.6 U <4.6 U 0.26 U⁽²⁾ 0.22 U⁽²⁾ <0.23 U <0.92 U</p>

<4.6 U <4.6 U <4.6 U 0.83 U⁽²⁾ 0.77 U⁽²⁾ 0.47 U⁽²⁾ 0.59

U <920 | U <12 | U <4.6 | U <4.6 | U <4.6 | U | 0.30 | $U^{(2)}$ | 0.25 | $U^{(2)}$

	SOIL GAS										WELL	IDENTIFI	CATION	AND AN	ALYTIC	AL RESU	LTS (pp	bv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-VA	POR WEL	L - PRO	BE DEPT	H (feet)												
	LIMIT (ppbv)	46-27	Qual	47-08	Qual	47-18	Qual	47-30	Qual	48-08	Qual	48-17	Qual	48-35	Qual	49-10	Qual	49-18	Qual	49-30	Qual	50-08	Qual	50-18	Qual	50-35	Qual	51-18 (Qual
Nonmethane Organics as methane (ppmv)		86		(3)		110		160		9,800		46,000		800		49		100		100		19		40		75		31,000	
Methane (ppmv)	12,500°°	< 0.50	U			680	<u> </u>	2,100	1	365,000		539,000	<u> </u>	37,000		2.6		< 0.50	υ	< 0.50	υ	6.0	U ⁽²⁾	5.1	U ⁽²⁾	< 0.50	υ	386,000	
Vinyl chloride	25	<1.6	U			<1.6	U	<1.6	U	480	ì	<1,600	U	<20	U	<7.8	U	<7.8	U	<7.8	U	< 0.39	U	< 0.39	υ :	< 0.39	U	<1.6	U
Chloroethane	75,200	<1.5	U		1	<1.5	U	<1.5	U	<.380	U	<1,500	i U	<19	U	<7.6	U	<7.6	U	<7.6	υ	< 0.38	U	< 0.38	υ	< 0.38	U	<1.5	U
Acetone	31,200	11	! !		1 !	6.5	i	14	<u>į 1</u>	<420	: υ :	<1,700	U	<21	<u>' U </u>	8.6	1 I	17	;	11 .	. i	28	1	11	U'21	21	ļ	¹ <1.7 ¹	U
trans-1,2-Dichloroethene	3,680	<1.0	υ		İ	<1.0	U	<1.0	<u> U </u>	<250	U	<1,000	υ	<13	υ	<5.0	U	<5.0	U	<5.0	บ	< 0.25	U	< 0.25	U	< 0.25	U	<1.0	U
1,1-Dichloroethane	25,600	<0.99	U			<0.99	U	< 0.99	U	<250	U	<990	U	<12	U	9.6		<4.9	U	<4.9	U	< 0.25	U	< 0.25	U	2		<1.00	υ
cis-1,2-Dichloroethene	1,860	0.81	J			<1.0	l U	<1.0	U	<250	็บ	<1,000	U	<13	<u> </u>	<5.0	U :	<5.0	U	<5.0	υ	0.26		< 0.25	U	7			U
Chloroform	340	1.3			!	6.7	!	< 0.82	U	<200_	U	<820	U	<10	U	4.7		3.3	J	<4.1	U	2.4	! !	1.3	<u> </u>	0.9	!	<0.83	_
1,2-Dichloroethane	360	3.2	<u> </u>		1 1	11	<u> </u>	4.9	1	<250	U	<990	U	<12	U	<4.9	U	<4.9	U	<4.9	U	<0.25	υ	< 0.25	U	< 0.25	U	<1.00	U
1,1,1-Trichloroethane	36,800	8.3			1	6.5		< 0.73	υi	<180	U	<730	U	<9.2	U	1,300		570		3.20	U'2'	57	<u> </u>	14		7	<u>:</u>	<0.74	U
Benzene	200	<1.3	υ			<1.3	U	<1.3	U	2,200	<u>† </u>	6,700	<u> </u>	12	J	<6.3	U	<6.3	U	<6.3	U	0.28)	0.41	1	<0.31	; U	11	
Carbon Tetrachloride	68	<0.64	U		;	< 0.64	υ_	< 0.64	U	<160	υ :	<640	U	<8.0	: U	<3.2	υ	<3.2	U	<3.2	U	<0.16	l U	<0.16	Ui	<0.16	U	<0.64	ีย
1,2-Dichloropropane	186	_<0.87	U			< 0.87	υ	< 0.87	U	<220	U	<870	U	<h< th=""><th>U</th><th><4.3</th><th>U</th><th><4.3</th><th>U</th><th><4.3</th><th>U</th><th>< 0.22</th><th>U</th><th><0.22</th><th>l u l</th><th><0.22</th><th>υ</th><th><0.87</th><th>U</th></h<>	U	<4.3	U	<4.3	U	<4.3	U	< 0.22	U	<0.22	l u l	<0.22	υ	<0.87	U
Trichloroethene	822	31				2.5	U(2)	2.2	U'2)	<190	ี บ	<740	U	<9.3	U i	3.8	U'2)	16	U'2>	17	U'21]	0.63	!	0.96	!	4.00	i	<0.75	υ
1,1,2-Trichloroethane	440	< 0.73	υ		<u> </u>	< 0.73	U	< 0.73	υ!	<180	l U :	<730	U	<9.2	U	<3.7	U	<3.7	U	<3.7	U	<0.18	L U	<0.18	U	<0.18	U	< 0.74	U
Toluene	21,200	2.1	: !		<u> </u>	2.5	U'21	3.6	: :	<270	U	<1,100	! U !	9.4	J	<5.3	U	<5.3	U	<5.3	U_!	1.7	U ⁽²⁾	1.1	U'2)	0.9	U ⁽²⁾	<1.1	U
1,2-Dibromoethane	6	<0.52	U			< 0.52	U	< 0.52	υ	<130	U	<520	: U !	<6.5	υl	<2.6	Ü	<2.6	U	<2.6	U :	< 0.13	υ	<0.13	U	< 0.13	U	<0.53	U
Tetrachloroethene	1,064	220	í		1	9.9	i	26		<150	υ:	<590	υ	18		54		730		900	i	1.4	L	2.7		2.8	Į.	<0.60	U

6,400

U <0.92 U 170 J 1,300

280

<230

<0.92 | U

< 0.92

1.6

0.58

49,000 14,280

14,280

Ethylbenzene

o-Xylene

m- & p-Xylenes

ppmv = parts per million by volume.

ppbv = parts per billion by volume.

Bold Numbers = Concentrations above threshold limits.

Italicized numbers = Concentrations above site-boundary threshold limits (one half the soil gas threshold limit shown).

<0.92 U

<0.92 U

1.6

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⁽²⁾ Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

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VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

	SOIL GAS							-			WELL	IDENTIF	CATION	AND AN	ALYTIC	AL RESU	JLTS (pr	bv, unless	noted)										
PARAMETERS	THRESHOLD	·											WDI-VA	POR WEL	L - PRO	BE DEPT	H (feet)												
	LIMIT (ppbv)	51-30	Qual	BKGRND	Qual	BKGRND 2/18	Qual	05-29fd	Qual	11-35d	Qual	12-34d	Qual	14-35d	Qual	16-34d	Qual	17-35d	Qual	22-35d	Qual	25-35fd	Qual	27-19d	Qual	27-35d	Qual	30-23d	Qual
Nonmethane Organics as methane (ppmv)		2,600		1.6		2.1		85		(5)		58		500		(5)		51		76		10,000		(5)		92		(5)	
Methane (ppmv)	12,500°	41,000	J ⁽⁴⁾	2.2		5.6		12,000	İ			1.1	i	7,200	ii			< 0.50	U	0.78		487,000				<0.50	U		
Vinyl chloride	25	82	<u> </u>	< 0.39	U	<1.6	U	<1.6	U	6.5	!				1	<1.6	υ		į		1	<200	υ	<1.6	U			<3.9	U
Chloroethane	75,200	<76	U	< 0.38	U	<1.5	U	<1.5	U	<1.9	U					<1.5	U		1	i	i -	<190	Ü	<1.5	U			<3.8	υ
Acetone	31,200	<84	U] 13	1	7.5	1	4.5		<2.1	υ		: 1		1 1	2.5	1		:	:	!	<210	U	40				<4.2	U
trans-1,2-Dichloroethene	3,680	320		<0.25	U	<1.0	U	<1.0	U	<1.3	U					<1.0	U	!	1	1		<130	υ	<1.0	U			5.4	
1,1-Dichloroethane	25,600	<50	iυ	<0.25	Ιυ	<0.99	U	<0.99	U	0.98	J					0.96	J		i		1	<120	U	<0.99	U			<2.5	U
cis-1,2-Dichloroethene	1,860	320	i	<0.25	U	<1.0	U	0.73	J	1.9	į		1 1		i !	<1.0	U		!	i	1	<130	ΰ	<1.0	U			6.6	
Chloroform	340	<41	υ	<0.21	U	< 0.82	υ	<0.82	U	<1.0	U		:			1.2			!	:		<100	υ	<0.82	U			<2.0	υ
1,2-Dichloroethane	360	<50	υ	<0.25	U	< 0.99	U	<0.99	U	<1.2	U		;		1	< 0.99	ŀυ		i	i	1	<120	U	<0.99	U		i	<2.5	υ
1,1,1-Trichloroethane	36,800	160		0.16	J	<0.73	U	<0.73	U	< 0.93	· U				i i	6.2	i		1			<92	U	21				9.3	
Benzene	200	310		0.74	ĺ	0.93	J	<1.3	U	1.6	i				!!	<1.3	U		1			<160	U	1.1	J		į	<3.1	υ
Carbon Tetrachloride	68	<32	U	0.12	J	< 0.64	U	<0.64	υ •	< 0.80	υ]		:	< 0.64	U		!			<80	U	<0.64	U			<1.6	υ
1,2-Dichloropropane	186	<44	U	<0.22	U	< 0.87	U	<0.87	U	<1.1	υ					<0.87	U		i		i	<110	U	<0.87	υI			<2.2	U
Trichloroethene	822	200	i	<0.19	ίU	<0.74	U	2.7	U'2)	7.5					i I	90			1		-	<93	U	< 0.74	υ		1	31	
1,1,2-Trichloroethane	440	<37	U	<0.19	U	<0.73	U	<0.73	U	< 0.93	U				: [< 0.73	U		;			<92	U	< 0.73	υ			<1.8	U
Toluene	21,200	40	j	2.0	l	2.1		<1.1	U	1.5	!		1		1	1.1			;		İ	<130	υ	4.3				2.8	
1,2-Dibromoethane	6	<26	U	< 0.13	U	< 0.52	υ	<0.52	U	< 0.66	U		:			<0.52	U		:		i	<65	U	< 0.52	υ		. 1	<1.3	U
Tetrachloroethene	1,064	<30	U	1.5	j	0.57	J	17		38	[1			1.9						<74	U	0.80			ī	32	
Ethylbenzene	49,000	69		0.20	J	<0.92	U	<0.92	U	<1.2	U					< 0.92	U				i	<120	U	0.79	j		1	<2.3	U
m- & p-Xylenes	14,280	110		0.68		0.88	J	0.82	j	<1.2	U		1 1		:	< 0.92	U					<120	U	3.3				2.1	J
o-Xylene	14,280	<46	U	0.26		<0.92	U	< 0.92	U	<1.2	U		i		: 1	< 0.92	U		1			<120	U	0.92				<2.3	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

ppmv = parts per million by volume.

ppbv = parts per billion by volume.

Bold Numbers = Concentrations above threshold limits.

⁽²⁾ Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

⁽³⁾ Well not sampled this quarter

⁽⁴⁾ The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

⁽⁵⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

																												Page 8 of 9
	SOIL GAS										WELL	IDENTII	ICATIO	N AND AN	ALYTIC	AL RESU	JLTS (p	pbv, unless i	noted)									
PARAMETERS	THRESHOLD												WDI-V	APOR WEI	L - PRO	BE DEPT	H (feet)											
	LIMIT (ppbv)	31-10d	Qual	32-35d	Qual	34-10d	Qual	37-10d	Qual	40-10d	Qual	40-25d	Qual	41-20d	Qual	43-32fd	Qual	43-32fdd	Qual	44-30fd	Qual	47-18d	Qual	48-08fd	Qual 4	19-10fd	Qual	50-18d Qual
Nonmethane Organics as		(5)		68	1 1	30		(5)	ļ	54]	(5)		(5)		420	!	410		150		(5)	1	9,500	- 1	49	1	37
methane (ppmv)		(3)			j l	.,,	!	(27)		J-1	<u> </u>				1	420	l	1 410		150		(3) _	ļ	2,500		77	. !	•"
Methane (ppmv)	12,50011			< 0.50	U	2.4	_		i	8,200			i		[24,000	Ţ	23,000	1	5,800				369,000	1	2.4		5.2
Vinyl chloride	25	< 0.39	; U					1 <1.6	υ		1	<3.9	iυ	<1.6	υ	240	Į.		į i	46		<1.6	υ	520		<7.8	U	<0.39 U
Chloroethane	75,200	< 0.38	U		ì			<1.5	υ			<3.8	l U	<1.5	U	<15	U	1		<3.8	U	<1.5	U	<380	U	<7.6	υ	<0.38 U
Acetone	31,200	6.2			1			8.7				<4.2	U_	3.1	1	<17	U			<4.2	υ	5.8	:	<420	U	9.9	ì	11
trans-1,2-Dichloroethene	3,680	< 0.25	U		į į		1	<1.0	υ	i	1	<2.5	U	<1.0	U	8.2	j	į	1	<2.5	υ	<1.0	ΙÜ	<250	U :	<5.0	U	<0.25 U
1,1-Dichloroethane	25,600	<0.25	υ		T			1.3			_	<2.5	U	<0.99	U	<9.9	U	:		41		<0.99	บ	<250	U i	9.1	ł	<0.25 U
cis-1,2-Dichloroethene	1.860	< 0.25	lυ		1 i			<1.0	: บ !			<2.5	U	<1.0	υ	180	T			<2.5	U	<1.0	υ	<250	U	<5.0	U	<0.25 U
Chloroform	340	2.8	-		i 1			1.1	į		T	<2.0	υ	<0.82	υ	<8.2	U	1		<2.1	U	6.6		<200	υ	4.5		1.3
1,2-Dichloroethane	360	0.37	<u> </u>		1 1			<1.0	U !		1	<2.5	: U	<0.99	U :	<9.9	U			<2.5	υ	11		<250	U	<4.9	U	<0.25 U
1,1,1-Trichloroethane	36,800	68	i :		1 1			2,900			Ĭ	2.1		35		<7.3	U			51 .	II	6.4	i	<180	U	1,300	U ⁽²⁾	14 ;
Benzene	200	< 0.31	! U					9.2			İ	<3.1	U	<1.3	·υ	16	1		!	<3.1	U	<1.3	U	2,100		<6.3	U	0.41
Carbon Tetrachloride	68	< 0.16	i u :		T			<0.64	U			<1.6	υ	<0.64	U	<6.4	U	i		<1.6	U	< 0.64	U	<160	U ·	<3.2	U	<0.16 U
1,2-Dichloropropane	186	<0.22	U				- 1	<0.87	υ		1	<2.2	υ	<0.87	U	<8.7	U			39		< 0.87	· U	<220	U .	<4.3	υ	<0.22 U
Trichloroethene	822	0.45			1		1	0.98	j			5.5	:	< 0.74	l U	<7.4	U	[]		<1.9	υ	2.4	:	<190	U :	3.60	J	0.97
1,1,2-Trichloroethane	440	<0.18	υ		1		:	<0.74	U			<1.8	U	< 0.73	U	<7.3	1 U		ji	<1.9	U	<0.73	υ	<180	U	<3.7	υ	<0.18 U
Toluene	21,200	0.85			1 :			1.8	1			2.3	J	<1.1	U	<11	U			<2.7	U	2.6		<270	U	<5.3	U :	1.1
1,2-Dibromoethane	6	< 0.13	U		: E		:	<0.53	υ			<1.3	υ	< 0.52	υ	<5.2	U	1 !		<1.3	U	< 0.52	Ü	<130	υΞ	<2.6	υ.	<0.13 U
Tetrachloroethene	1,064	17			1		:	0.59	j			130		18	1	<5.9	υ			1.8	U ⁽²⁾	10	:	<150	U	55		2.8
Ethylbenzene	49,000	< 0.23	υ					1.1			i	<2.3	! U	<0.92	U	<9.2	U			<2.3	U	< 0.92	U	160.00	J	<4.6	υ	0.22 j J
m- & p-Xylenes	14,280	0.42			i		:	4.8			j	2	J	<0.92	U	9.8				<2.3	υ	1.6		280		<4.6	U	0.78
o-Xylene	14,280	< 0.23	U		!		,	0.82	J			<2.3	U	<0.92	U	<9.2	υ	!		<2.3	Ü	0.58	J	<230	U :	<4.6	U	0.27

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

ppmv = parts per million by volume.

ppbv = parts per billion by volume.

Bold Numbers = Concentrations above threshold limits.

⁽²⁾ Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

⁽³⁾ Well not sampled this quarter.

⁽⁴⁾ The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

⁽⁵⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

VAPOR WELL ANALYTICAL DATA FOR FEBRUARY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

																											Page 9 of
	SOIL GAS										WELL II	DENTIFICA	ATION A	ND ANAL	YTICAL R	ESULTS	(ppbv, unle	ss noted)									
PARAMETERS	THRESHOLD									-		WI	DI-VAPO	OR WELL -	PROBE D	EPTH (fee	et)										
	LIMIT (ppbv)	51-18fd	Qual	51-30d	Qual	SKGRNDd	Qual			T	1		- 1			ļ								1		i	
Nonmethane Organics as methane (ppmv)		35,000		2,400		1.8							i											ĺ			i
Methane (ppmv)	12,500"	450,000	i	42,000		2.2	į							Ī	ì				i					- i		1	
Vinyl chloride	25	<1.6	U			<0.39	υ	1	`	Ī				!				İ						T		j	
Chloroethane	75,200	<1.5	U		T I	<0.38	! U												ţ								
Acetone	31,200	<1.7	υ			13	i	i :		i	i					i	1	i	1		i		1	,	-	i	
trans-1,2-Dichloroethene	3,680	<1.0	υ			<0.25	υ			1			1	!		i	1	1		1	i			i		1	i
1,1-Dichloroethane	25,600	<1.00	U			<0.25	U																	-			
cis-1,2-Dichloroethene	1,860	<1.0	U			< 0.25	U	1						i				1	i	! !		i		:		i i	1
Chloroform	340	< 0.83	U			< 0.21	U							1				!		i i		-		-		1	
1,2-Dichloroethane	360	<1.00	υ		T	< 0.25	U	1	1					ı	1	1		i					İ	-	-	i	
1,1,1-Trichloroethane	36,800	<0.74	U			0.14	J							j	-			1				+		1		į	
Benzene	200	15				0.72	1	1										ļ	!								
Carbon Tetrachloride	68	< 0.64	U			0.12	ļ j		1	l				i	i	i	1	ŀ						1	T		
1,2-Dichloropropane	186	< 0.87	U		1	< 0.22	U		į į				!		1			i	1	: [1	i
Trichloroethene	822	<0.75	υ			< 0.19	υ				Ī			į	i				i	i			i	!		1	
1,1,2-Trichloroethane	440	< 0.74	U			<0.19	U	i	i.		1			i	1	Ĺ				}				i	i	1	
Toluene	21,200	<1.1	U		:	2.0	i	Į.								1		!	Į	. !	1				1	-	i
1,2-Dibromoethane	6	< 0.53	U			< 0.13	υ	!		1	1			1	1	i				1			-	-	1	ļ	!
Tetrachloroethene	1,064	< 0.60	U			1.5								1	I		1	1		1		I					
Ethylbenzene	49,000	< 0.92	U		1	0.17	J		ļ						j									1	1		
m- & p-Xylenes	14,280	0.74	J			0.62									:]				1	-			
o-Xylene	14,280	<0.92	U			0.23	j	1					Ţ	i							i			T		-	1

(1) The site boundary threshold level for methane is used for all comparisons.

(2) Due to the trace-presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U." This was determined during data validation.

(4) The reported positive results should be considered estimated and have been flagged "J". The on-column concentrations of these compounds exceeded the calibration ranges of the instrument.

(5) Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume.

ppbv = parts per billion by volume. **Bold Numbers** = Concentrations above threshold limits.

TABLE 4.14 VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 9

	SOIL GAS										WEL	L IDENTIF	ICATIO	N AND AI	NALYTI	ICAL RES	ULTS (p	obv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-V	APOR WE	ELL - PR	OBE DEP	TH (feet)												
	LIMIT (ppbv)	01-35	Qual	02-35	Qual	03-35	Qual	04-23	Qual	05-29	Qual	06-34	Qual	08-35	Qual	10-35	Qual	11-35	Qual	12-34	Qual	13-31	Qual	14-35	Qual	16-34	Qual	17-35	Qual
Nonmethane Organics as methane (ppmv)		83		120		200		14,000		69	U ⁽¹⁾	74	U ⁽¹⁾	54		150		92	U ⁽¹⁾	58		180		980		47	U ⁽¹⁾	50	i U ⁽¹⁾
Methane(ppmv)	12,5002	10	U(1)	8,700	1	16,200	1 1	190,000		540		2.400		10,000	<u>i</u>	6,700		15,000		1.0	1	13,400		8,150	<u>l</u>	< 0.50	U	< 0.50	U
Vinyl chloride	25	<1.6	U	<3.9	U	<20	U	280	j j	<1.6	U	3.3		17		120		5.6	1	<1.6	l U	46		350		<7.8	U	<7.8	U
Chloroethane	75.200	<1.5	ן ט	<3.8	U	<19	U	<380	U	<1.5	U	<1.5	U	<7.6	U	<7.6	U	<1.5	i U	<1.5	U	<1.5	U	<95	U	<7.6	U	<7.6	· U
Acetone	31,200	6.7	U ⁽¹⁾	<4.2	U	<21	υ	<420	υ	4.5		<1.7	U	<8.4	υ	<8.4	υ	<1.7	U	<1.7	U	<1.7	U	<110	U	6.5	J	7.7	J
trans-1,2-Dichloroethene	3,680	<1.0	υ	<2.5	U :	<13	U	<250	U	<1.0	U	<1.0	U	<5.0	U	<5.0	U	<1.0	U	<1.0	i U	12	Ι,	<63	UI	<5.0	U	<5.0	U
1,1-Dichloroethane	25,600	< 0.99	υ	<2.5	U	<12	U	<250	U	< 0.99	י ט י	<0.99	U	<4.9	U	85	!	<0.99	l U	<0.99	U	0.99		67	i	<4.9	U :	<4.9	U
cis-1,2-Dichloroethene	1.860	<1.0	l U l	<2.5	υ	<13	j U :	<250	U	<1.0	υ	<1.0	l u !	<5.0	υ	90	ĺ	2.6	1	<1.0	U	69		<63	υ	<5.0	U	<5.0	U
Chloroform	340	< 0.82	· U T	<2.0	U	<10	U '	<200	υ,	< 0.82	U	< 0.82	U	<4.1	U	<4.1	: U i	< 0.82	Ū	<0.82	U	< 0.82	U	<51	U	3.2	J	<4.1	U
1,2-Dichloroethane	360	<0.99	U	<2.5	U	<12	υ	<250	U	< 0.99	U	<0.99	υ	<4.9	U	<4.9	U	<0.99	U	<0.99	i U I	< 0.99	i U !	<62	U	<4.9	U	<4.9	U
1,1,1-Trichloroethane	36.800	< 0.73	U	<1.8	U	<9.2	U	<180	U	<0.73	U	< 0.73	U	<3.7	U	<3.7	υ	< 0.73	່ ບ	< 0.73	U	< 0.73	ו ט ו	<46	U	8.9	i	240	
Benzene	200	<1.3	υ	<3.1	U	<16	U	1,100		<1.3	υ	<1.3	U	<6.3	ļυ	<6.3	υ	1.5	U ⁽¹⁾	<1.3	υ	3.6	U(I)	<78	U	<6.3	U	<6.3	U
Carbon Tetrachloride	68	< 0.64	i U i	<1.6	U	<8.0	U	<160	υi	< 0.64	! U	< 0.64	U	<3.2	U	<3.2	U	<0.64	U	< 0.64	U	<0.64	U	<40	ו ט	<3.2	i U I	<3.2	U
1,2-Dichloropropane	186	<0.87	υ	<2.2	U	<11	U	<220	ן ט	<0.87	U	< 0.87	U	<4.3	U	<4.3	U	< 0.87	i U	<0.87	U	< 0.87	U	97		<4.3	U	<4.3	U
Trichloroethene	822	<0.74	U	<1.9	ı U	<9.3	lυ	<190	U	0.65	U(I)	0.49	U ⁽¹⁾	<3.7	U	<3.7	U	3.9	U(1)	1.2	U(I)	67	U ^(I)	<47	U	280		8.9	U ⁽¹⁾
1,1,2-Trichloroethane	440	<0.73	į U į	<1.8	U	<9.2	U	<180	U	<0.73	U	<0.73	U	<3.7	υ	<3.7	U	<0.73	U	<0.73	U	< 0.73	l U i	<46	U	<3.7	U	<3.7	U
Toluene	21,200	<l.1< td=""><td>! U </td><td><2.7</td><td>U</td><td><13</td><td>U</td><td><270</td><td> U </td><td><1.1</td><td>U</td><td><1.1</td><td>U</td><td><5.3</td><td>υ</td><td><5.3</td><td>U</td><td>2.5</td><td>i</td><td>2.0</td><td>.]</td><td>1.9</td><td></td><td><66</td><td>U</td><td><5.3</td><td>U</td><td><5.3</td><td>Ū</td></l.1<>	! U	<2.7	U	<13	U	<270	U	<1.1	U	<1.1	U	<5.3	υ	<5.3	U	2.5	i	2.0	.]	1.9		<66	U	<5.3	U	<5.3	Ū
1,2-Dibromoethane	6	< 0.52	U	<1.3	U	<6.5	ļυj	<130	U	< 0.52	υ	< 0.52	U	<2.6	υ	<2.6	U	<0.52	U	< 0.52	U	< 0.52	U	<33	U	<2.6	U	<2.6	U
Tetrachloroethene	1,064	6.0		<1.5	U	28		<150	υ	15		1.1		<3.0	U	<3.0	U	16		45		0.95]	<37	U	5		13 i	
Ethylbenzene	49,000	<0.92	U	2.4		<12	υ	430		<0.92	U	< 0.92	U	<4.6	ĹŪ	<4.6	U	< 0.92	U	<0.92	Ιυ	0.66	J	1,700		<4.6	υ	<4.6	U
m- & p-Xylenes	14,280	<0.92	U	2.6		<12	U	<230	U	< 0.92	U	<0.92	U	<4.6	U	<4.6	U	1.3		<0.92	U	1.6	j	1,300	<u> </u>	<4.6	U	<4.6	Ũ
o-Xylene	14,280	<0.92	υ	<2.3	U	<12	U	<230	U	< 0.92	U	<0.92	U	<4.6	U	<4.6	U	< 0.92	U	< 0.92	U	0.88	J	910		<4.6	U	<4.6	U

⁽¹⁾ Due to the trace-level presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U". This was determined during data validation.

U = analyte not detected.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate fd = field duplicate above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one half the soil gas threshold limit shown).

⁽²⁾ The site boundary threshold level for methane is used for all comparisons.(3) Well not sampled this quarter.

⁽⁴⁾ Duplicates may not have been performed on the same sample for each analysis.

J = analyte detected below reporting detection limit.

VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

																												Pa	age 2 of 9
	SOIL GAS										WEL.	LIDENTI						pbv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-V	APOR WE	ELL - PR	ROBE DEP	TH (feet)												
	LIMIT (ppbv)	18-36	Qual	20-35	Qual	21-36	Qual	22-35	Qual	23-36	Qual	24-35	Qual	25-35	Qual	26-35	Qual	27-09	Qual	27-19	Qual	27-35	Qual	28-10	Qual	28-25	Qual	29-10	Qual
Nonmethane Organics as methane (ppmv)		7,900		71	U ⁽¹⁾	94	U ⁽¹⁾	93	U(I)	150		77		7,400		55		75		10		100		(3)		(3)		17	
Methane (ppmv)	12,5002	6.4		< 0.50	U	1.3	U ⁽¹⁾	340	ii	4,400	1	<0.50	U	334,100	j	: 0.93		700	!	1.3	!	<0.50	U		i		1 :	1.1	
Vinyl chloride	25	<390	U	<7.8	U	<7.8	U	<78	ย	40		<3.9	U	<390	U	<1.6	U	<1.6	į U	<1.6	U	<1.6	U	!	!		i	<1.6	U
Chloroethane	75,200	<380	υ	<7.6	υ	<7.6	U	<76	υ	<19	U	<3.8	ΙŪ	<380	ŀυ	<1.5	U	<1.5	υ	<1.5	! U	<1.5	U		i :			<1.5	' U
Acetone	31,200	<420	U	5.2	J	11		<84	U	92	!	3.4	j	<420	υ	<1.7	U	6.4	!	27	i	9.5	1	ł			1	4.2	i U ^(I)
trans-1,2-Dichloroethene	3,680	<250	U	<5.0	ı U	<5.0	υ	<50	U	42	1	<2.5	U	<250	U	<1.0	U	<1.0	. U	<1.0	iυ	<1.0	υ	1	!			<1.0	U
1,1-Dichloroethane	25.600	<250	ΰ	<4.9	iυ	<4.9	U	<49	U	13		<2.5	U	<250	U	! 1.7		1.2	i	<0.99	U	< 0.99	U	1	i !		! !	<0.99	: U
cis-1,2-Dichloroethene	1,860	<250	l Ü	<5.0	U	<5.0	U	<50	U	130	-	<2.5	U	<250	U	: 77	1 :	<1.0	: U	<1.0	U	<1.0	U	!	i j			<1.0	ΙU
Chloroform	340	<200	U	<4.1	U	<4.1	U	<41	U	<10	U	<2.0	U	<200	į U	0.51	J	<0.82	U	0.93	1	< 0.82	U				1 1	0.53	į J
1,2-Dichloroethane	360	<250	i U	<4.9	l U	<4.9	U	<49	i U !	<12	! U	<2.5	U	<250	ΙU	<1.0	U	< 0.99	U	<0.99	·υ	< 0.99	jυ					<0.99	U
1,1.1-Trichloroethane	36.800	<180	· U	<3.7	ΙU	<3.7	U	<37	U	<9.2	υ	<1.8	! U	<180	iυ	1.0	i	4.9]	26	<u> </u>	< 0.73	U		<u>i </u>		! !	390	i
Benzene	200	420		<6.3	U	<6.3	U	<63	υ	<16	U	<3.1	U	<310	U	1.1	J	<1.3	U	<1.3	U	<1.3	U		! !		1	<1.3	l U
Carbon Tetrachloride	68	<160	U	<3.2	U	<3.2	U	<32	: U	<8.0	U	<1.6	υ	<160	1 U	< 0.64	U	< 0.64	! U	< 0.64	U	< 0.64	υ				<u>l i</u>	< 0.64	U
1,2-Dichloropropane	186	<220	U	<4.3	υ	<4.3	U	<43	U	1</td <td>U</td> <td><2.2</td> <td>U</td> <td><220</td> <td>lυ</td> <td><0.87</td> <td>U</td> <td><0.87</td> <td>·υ</td> <td><0.87</td> <td>lυ</td> <td>< 0.87</td> <td>U</td> <td><u> </u></td> <td>1</td> <td></td> <td>1</td> <td><0.87</td> <td>υ</td>	U	<2.2	U	<220	lυ	<0.87	U	<0.87	·υ	<0.87	lυ	< 0.87	U	<u> </u>	1		1	<0.87	υ
Trichloroethene	822	<190	U	4.9	U(I)	360	!	3,200		850		8.3	, U ⁽¹⁾	<190	U	76	11	< 0.74	υ	<0.74	lυ	<0.74	U				<u> </u>	< 0.74	į U
1,1,2-Trichloroethane	440	<180	l U	<3.7	U	<3.7	U	<37	U	<9.2	U	<1.8	U	<180	U	< 0.74	U	< 0.73	U	<0.73	U	< 0.73	U					<0.73	U
Toluene	21,200	190	J	<5.3	U	<5.3	U	<53	U	<13	U	<2.7	υ	<270	U	3.5		<1.1	iυ	1.6		<1.1	U				! !	1.1	U ⁽¹⁾
1,2-Dibromoethane	6	<130	U	<2.6	U	<2.6	U	<26	U	<6.5	U	<1.3	U	<130	U	<0.53	U	< 0.52	¦ U	<0.52	Ü	< 0.52	U	1	l i		1	<0.52	υ
Tetrachloroethene	1,064	<150	U	250		17		190	TT	23		6.8		<150	U	28	!	< 0.59	U	1.7		0.72					1	1.5	
Ethylbenzene	49,000	<230	U	<4.6	U	<4.6	U	<46	U	<12	υ	<2.3	U	<230	U	<0.92	U	<0.92	U	<0.92	U	< 0.92	U		<u> </u>			< 0.92	U
m- & p-Xylenes	14,280	500	i	<4.6	U	<4.6	U	<46	υ	<12	U	<2.3	U	<230	U	1.2	Ti	<0.92	U	0.88	j	< 0.92	U					0.84	U ⁽¹⁾
o-Xylene	14,280	<230	U	<4.6	U	<4.6	U	<46	U	<12	U	<2.3	U	<230	U	< 0.92	U	<0.92	U	<0.92	U	< 0.92	U					<0.92	U

(1) Due to the trace-level presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U". This was determined during data validation.

(2) The site boundary threshold level for methane is used for all comparisons.

(3) Well not sampled this quarter.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate fd = field duplicate shown).



⁽⁴⁾ Duplicates may not have been performed on the same sample for each analysis.

VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

																												Pa	ige 3 of 9
	SOIL GAS										WEL	L IDENTIF	ICATIO	N AND AI	NALYTI	CAL RES	ULTS (pp	bv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-V.	APOR WE	LL - PR	OBE DEP	TH (feet)												
	LIMIT (ppbv)	29-23	Qual	29-35	Qual	30-07	Qual	30-23	Qual	30-35	Qual	31-10	Qual	31-30	Qual	32-08	Qual	32-18	Qual	32-35	Qual	33-10	Qual	33-35	Qual	34-10	Qual	34-23	Qual
Nonmethane Organics as methane (ppmv)		47		73		52		180		220		24		72		28		60	:	93		36		67	,	39	:	60	
Methane (ppmv)	12,500°21	< 0.50	υ	<0.50	↓ U	9.8		12.000		13,000		0.69	!	0.75		0.95		< 0.50	U	< 0.50	U	0.99	1	1.4)	0.70	1	<0.50	υ
Vinyl chloride	25	<1.6	U	<1.6	U	<1.6	l U	1.3	J	2.7	;	<1.6	U	<1.6	Lυ	<1.6	U	<1.6	U	<1.6	. U ;	<1.6	υ	<1.6	· U	<1.6	υ :	<1.6	U
Chloroethane	75.200	<1.5	U .	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	Ü	<1.5	l U	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	lυ	<1.5	U	<1.5	U
Acetone	31,200	3.5	i U ⁽¹⁾	8.9	U ⁽¹⁾	<1.7	U	<1.7	U	<1.7	υ	4.7		4.3		8.6		8.4	1	14		4.7	1	6.3		4.4	:	7.1	1
trans-1,2-Dichloroethene	3,680	<1.0	υ	<1.0	l U	<1.0	U	5.8	1 1	14		<1.0	iυ	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U ·	<1.0	t U
1,1-Dichloroethane	25,600	< 0.99	. U	<0.99	! U	6.0	! .	2.4		0.78	J	< 0.99	υ	<0.99	U	0.99	1	<0.99	U	<0.99	U	0.97	J	1.5		<0.99	υ	<0.99	υ
cis-1,2-Dichloroethene	1,860	<1.0	U ·	<1.0	υ	<1.0	ı U	3.8	i i	11		<1.0	υ	<1.0	U	<1.0	υ	<1.0	U	<1.0	U	<1.0	U	1.9	1 1	<1.0	U	<1.0	ΙU
Chloroform	340	< 0.82	U	2.5	i	0.68	j	< 0.83	U	<0.83	U i	< 0.82	<u> </u>	<0.82	U	0.99		0.82	:	2.0	1	8.9		8.8		<0.82	U :	0.89	i
1,2-Dichloroethane	360	< 0.99	U	< 0.99	U	<1.0	U	<1.0	U	<1.0	i U	<0.99	U	<0.99	U	<0.99	U	<0.99	U	<0.99	. U :	<0.99	U	<0.99	υ	<0.99	U	<0.99	U
1,1,1-Trichloroethane	36,800	5.1	1	2.6		1.400		35	1	1.9	i i	36		6.7	Ì	47	1	8.4	!	3.0	1	290		27	i	470	i	4.9	1
Benzene	200	<1.3	: U	<1.3	; U	<1.3	U	<1.3	υ	<1.3	U	<1.3	: ប	<1.3	U	<1.3	U	<1.3	υ	<1.3	U	<1.3	Ų.	<1.3	U	<1.3	υ	<1.3	⊢ U
Carbon Tetrachloride	68	0.69	<u> </u>	< 0.64	l U	< 0.64	! U !	< 0.64	U	<0.64	υ	< 0.64	U	<0.64	U	<0.64	U	<0.64	U	< 0.64	U	< 0.64	lυ	<0.64	U	<0.64	U_i	<0.64	U
1,2-Dichloropropane	186	< 0.87	U	<0.87	U	< 0.87	U	<0.87	υ	< 0.87	U	< 0.87	U	<0.87	י ט י	< 0.87	U	< 0.87	U	<0.87	U	< 0.87	U	<0.87	U	<0.87	U	<0.87	υ
Trichloroethene	822	< 0.74	U	1.4	U ⁽¹⁾	0.51	J	21		40		< 0.74	lυ	6.0	U ⁽¹⁾	<0.74	U	< 0.74	U	0.83	U ⁽¹⁾	0.58	U(1)	360		0.67	U ⁽¹⁾	<0.74	υ
1,1,2-Trichloroethane	440	< 0.73	U	<0.73	U	< 0.74	U	<0.74	U	<0.74	U	< 0.73	U	<0.73	U	<0.73	U	<0.73	U	<0.73	υi	< 0.73	U	<0.73	U	<0.73	U	<0.73	U
Toluene	21,200	1.1	U(I)	0.94	U(I)	1.4	T	0.72	j	1.1		1.1	Ì	<1.1	U	0.75	J	<1.1	υ	<1.1	U	0.65	j	<1.1	U	0.67	J	<1.1	U
1,2-Dibromoethane	6	<0.52	U	<0.52	U	< 0.53	U	< 0.53	U	< 0.53	υ	<0.52	U	<0.52	U	<0.52	U	< 0.52	l U	< 0.52	U	< 0.52	υ	<0.52	U	<0.52	U	<0.52	Ĺυ
Tetrachloroethene	1,064	7.1		17		2.5		27	i	39		16		35		1.4	i	1.1		1.2	i l	1.0		21	!	2.5		11	
Ethylbenzene	49,000	<0.92	U	<0.92	υ	< 0.92	υ	<0.92	U	< 0.92	υ	<0.92	U	<0.92	U	<0.92	υ	<0.92	U	<0.92	U	<0.92	U	<0.92	υ	<0.92	U	<0.92	U
m- & p-Xylenes	14,280	0.58	U(I)	<0.92	U	<0.92	U	<0.92	U	< 0.92	U	0.68	J	< 0.92	U	<0.92	U	0.67	J	<0.92	U	<0.92	U	<0.92	υ	0.66	J	< 0.92	U
o-Xylene	14,280	< 0.92	υ	<0.92	U	<0.92	U	< 0.92	U	< 0.92	U	<0.92	U	<0.92	U	<0.92	U	<0.92	U	<0.92	U	< 0.92	U	<0.92	U	< 0.92	υ	<0.92	U

- (1) Due to the trace-level presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U". This was determined during data validation.
- (2) The site boundary threshold level for methane is used for all comparisons.
- (3) Well not sampled this quarter.
- (4) Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate boundary threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one half the soil gas threshold limits shown).

VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 4 of 9

	SOIL GAS										WELL	IDENTIF	ICATION	N AND AN	NALYTI	CAL RES	ULTS (p	obv, unless	noted)					_				·	80 . 0. 7
PARAMETERS	THRESHOLD												WDI-VA	APOR WE	LL - PRO	OBE DEP	TH (feet)												
	LlMIT (ppbv)	34-40	Qual	35-10	Qual	35-38	Qual	36-10	Qual	36-30	Qual	37-10	Qual	37-30	Qual	38-10	Qual	38-34	Qual	39-07	Qual	39-30	' Qual	40-10	Qual	40-25	Qual	41-07	Qual
Nonmethane Organics as methane (ppmv)		60		27	ļ. !	63		21	U ⁽¹⁾	67	U ⁽¹⁾	17		56		29	U ⁽¹⁾	330		43	U ⁽¹⁾	59	U ⁽¹⁾	76		91		48	
Methane (ppmv)	12,500(2)	0.77	: !	1.0	1	3.7	1 1	2.0	U ⁽¹⁾	< 0.50	U	1.4		< 0.50	U	2.7	U ⁽¹⁾	140		<0.50	U	0.72	± U ⁽¹⁾	15,000		<0.50	U	<0.50	U
Vinyl chloride	25	<1.6	U	<3.9	U	<1.6	: U :	<1.6	U	<1.6	υ	<1.6	υ	<1.6	U :	<2.0	U	<20	U	<16	U	<3.9	: U	<3.9	U	<1.6	U	<1.6	U
Chloroethane	75,200	<1.5	U	<3.8	l U	<1.5	U	<1.5	U	<1.5	lυ	<1.5	υ	<1.5	_ U	<1.9	U	<19	U	<15	υ	<3.8	U	<3.8	U	<1.5	U	<1.5	U
Acetone	31,200	3.8	1	6.3	į	3.4	<u> </u>	6.2		3.8	i <u>l</u>	5.4	i .	5.1		11	1 ;	<21	U	<17	i U i	- 11		<4.2	U	11		5.3	i
trans-1,2-Dichloroethene	3.680	<1.0	U	<2.5	U	<1.0	U I	<1.0	U	<1.0	υ	<1.0	; U :	<1.0	U	<1.3	Ū	<13	l U	<10	. U	<2.5	! U :	<2.5	υ	<1.0	U	<1.0	υ
1,1-Dichloroethane	25,600	<0.99	U	<2.5	U	2.5		< 0.99	U	< 0.99	υ	1.6		<0.99	U	<1.2	U	<12	U	<9.9	U	<2.5	: U	<2.5	υ	< 0.99	U	<0.99	U
cis-1,2-Dichloroethene	1.860	<1.0	Ui	<2.5	i U	<1.0	υl	<1.0	υ	<1.0	U	<1.0	ı U	<1.0	U	<1.3	U	<13	i U	<10	i U	<2.5	U	<2.5	U	<1.0	U ·	<1.0	υ
Chloroform	340	2.1		<2.0	U	50		0.93	:	3.6		<0.82	U	< 0.82	υ	<1.0	i u i	<10	U	<8.2	U	<2.0	U	2.1		< 0.82	U.	<0.82	U
1,2-Dichloroethane	360	<0.99	U	<2.5	l U	2.3	ļ i	< 0.99	U	< 0.99	U	<0.99	ı U i	< 0.99	U	<1.2	U	<12	υ	<9.9	l U i	<2.5	U ;	7.5		<0.99	U	<0.99	U
1,1,1-Trichloroethane	36,800	2.5		49	1	11		9.9	į į	< 0.73	l U	1,400	!	9.9		120		12		640		230	1	17		2.3		34	
Benzene	200	<1.3	U	<3.1	ļυ	<1.3	U	<1.3	U	<1.3	U l	1.5	U(I)	<1.3	י ט	<1.6	U	<16	U	<13	υ	<3.1	i U	18	U(f)	<1.3	υ	<1.3	υ
Carbon Tetrachloride	68	< 0.64	U	<1.6	U	< 0.64	; U	< 0.64	U	< 0.64	U	< 0.64	υi	<0.64	U	< 0.80	U	<8.0	U	<6.4	; U	<1.6	U	<1.6	U	<0.64	U	<0.64	U
1,2-Dichloropropane	186	< 0.87	U	<2.2	U	< 0.87	U	< 0.87	U	< 0.87	U	< 0.87	U !	< 0.87	U	<1.1	U	<11	U	<8.7	U	<2.2	Ū	<2.2	U	<0.87	U	<0.87	U
Trichloroethene	822	6.0	U ⁽¹⁾	50	U ⁽¹⁾	1,500		< 0.74	U	< 0.74	U	< 0.74	U	<0.74	U	< 0.93	U	<9.3	U	<7.4	U	<1.9	υ	1.2	U ⁽¹⁾	7.3	U ⁽¹⁾	<0.74	U
1,1,2-Trichloroethane	440	< 0.73	U	<1.8	U	< 0.73	U	< 0.73	U	< 0.73	U	<0.73	U	<0.73	U	<0.92	U	<9.2	U	<7.3	U	<1.8	υ	<1.8	U	< 0.73	U	<0.73	υ
Toluene	21,200	<1.1	U	<2.7	U	<1.1	U	0.69	J	<1.1	Uj	1.9		<1.1	U	1.0	J	<13	U	1</th <th>i U </th> <th>1.8</th> <th>J</th> <th>2.7</th> <th></th> <th><1.1</th> <th>U</th> <th><1.1</th> <th>υ</th>	i U	1.8	J	2.7		<1.1	U	<1.1	υ
1,2-Dibromoethane	6	< 0.52	U	<1.3	U	<0.52	υ	< 0.52	U	< 0.52	U !	<0.52	ี่ย	< 0.52	U	< 0.65	U	<6.5	Lυ	<5.2	U	<1.3	U	<1.3	U	< 0.52	υl	<0.52	U
Tetrachloroethene	1,064	8.0		2.9	1	28	i	0.87		2.1		0.46	j	2.2		1.2		<7.4	υĪ	6.8		- 11	i !	2.7		190		35	
Ethylbenzene	49,000	<0.92	U	<2.3	U	< 0.92	U	< 0.92	U	<0.92	U	< 0.92	UI	<0.92	U	<1.2	U	<12	U	<9.2	ı U İ	<2.3	U	<2.3	υ	< 0.92	U	<0.92	U
m- & p-Xylenes	14,280	0.9	J	<2.3	U	<0.92	U	< 0.92	U	<0.92	U	0.61	J	<0.92	υ	0.81	J	<12	U	<9.2	U	<2.3	U	2.7		< 0.92	U	<0.92	Ü
o-Xylene	14,280	<0.92	U	<2.3	U	<0.92	U	< 0.92	U	< 0.92	U	<0.92	U	<0.92	U	<1.2	U	<12	U	<9.2	U	<2.3	U	<2.3	บ	< 0.92	U	<0.92	บ

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VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 5 of 9 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS **PARAMETERS** WDI-VAPOR WELL - PROBE DEPTH (feet) THRESHOLD LIMIT (ppbv) 41-20 Qual 42-10 Qual 42-30 Qual 43-09 Oual 43-19 Qual ! 43-32 44-07 Qual | 45-12 | Qual 45-22 | Qual | 45-30 Qual 44-16 Qual 44-30 Qual 46-07 Qual 46-15 Qual Nonmethane Organics as 270 11,000 methane (ppmv) 12.5002 15,100 20,500 <0.50 U 880 2,000 8.000 63,100 Methane (ppmv) 160 14,300 <0.50 U Vinyl chloride 25 <16 | 11 2.5 430 230 < 3.9 7.2 47 6,500 <1.6 ; 11 <20 U Chloroethane 75,200 <1.5 <3.8 <7.6 <1.5 <1.5 <1.5 <1.5 <380 U ! <19 | U 5.8 <1.7 U <1.7 <4.2 U <8.4 <420 U <21 U 8.8 Acetone 31.200 <1.7 U <1.7 U trans-1,2-Dichloroethene 3,680 <1.0 Ui <1.0 U Ш 8.6 <2.5 <5.0 U <1.0 4,700 <13 U <1.0 U 1,1-Dichloroethane 25,600 < 0.99 U < 0.99 U < 0.99 1.8 J 4 25 <250 U <12 U 3.6 cis-1,2-Dichloroethene 1.860 <1.0 U 65 98 190 <2.5 U < 5.0 U <1.0 U 8.000 <13 U <1.0 U Chloroform < 0.82 0.64 340 < 0.82 U < 0.82 1.8 <4.1 < 0.82 U <200 <10 1.1 1,2-Dichloroethane 360 < 0.99 U < 0.99 U 4.2 <0.99 U <2.5 U <49 U <0.99 υ 180 <12 < 0.99 ,1,1-Trichloroethane 36,800 22 3.2 3.2 <0.73 U 51 5.5 υ <9.2 U 83 110 <180 Benzene 200 <1.3 U 0.9 12 15 2.3 <6.3 U <1.3 2,800 41 U(1) <1.3 Carbon Tetrachloride 68 <0.64 U < 0.64 < 0.64 U <0.64 | U <1.6 U <3.2 < 0.64 <160 <8.0 U < 0.64 U <0.87 U 1,2-Dichloropropane 186 < 0.87 U 0.79 < 0.87 <2.2 <43 19 U <0.87 U J i 1 U U U <220 <11 U Trichloroethene 16 U⁽¹⁾ 822 < 0.74 U 21 6.4 $\mathfrak{v}^{(1)}$ 1.2 $\mathbf{U}^{(1)}$ < 1.9 <3.7 < 0.74 <9.3 U U υ 111 240 ,1,2-Trichloroethane <0.73 U <0.73 | U < 0.73 <9.2 U <0.73 440 < 0.73 <1.8 <3.7 < 0.73 <180 U 0.92 5.6 5.7 Toluene 21,200 ; J 1.8 < 5.3 1.6 770 <13 U <1.1 U <0.52 U 1.2-Dibromoethane < 0.52 U < 0.52 U <0.52 <1.3 <2.6 U < 0.52 U <6.5 U <0.52 | U 6 <130 Tetrachloroethene 1,064 15 <3.0 <0.59 <150 U <7.4 U 160 Ethylbenzene <0.92 | U < 0.92 49.000 U! 2.9 3.9 <2.3 U <4.6 U < 0.92 U 210 <12 | U | <0.92 U m- & p-Xylenes 14,280 0.57 < 0.92 U 2.8 7.0 1.8 <4.6 350 <12 <0.92 U U 21 1 o-Xylene 14,280 <0.92 U <0.92 U 3.3 0.78 1.6 <4.6 <12 U <0.92 U

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume pptv = parts per million by volume pptv = parts per billion by volume d = lab duplicate gove threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one half the soil gas threshold limits shown).

⁽¹⁾ Due to the trace-level presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U". This was determined during data validation.

⁽²⁾ The site boundary threshold level for methane is used for all comparisons.

⁽³⁾ Well not sampled this quarter.

⁽⁴⁾ Duplicates may have been performed on the same sample for each analysis.

VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 6 of 9 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS **PARAMETERS** WDI-VAPOR WELL - PROBE DEPTH (feet) THRESHOLD LIMIT (ppbv) 46-27 48-08 Qual 47-08 Qual 47-18 Qual 47-30 Qual Qual 48-35 Qual Qual 49-30 50-08 Qual 50-18 50-35 51-18 Qual 48-17 49-10 | Qual 49-18 Qual Qual Nonmethane Organics as 50 28,000 23 22.000 58 75 76 methane (ppmv) 12,500(2) U⁽¹⁾ 2.900 U⁽¹⁾ Methane (ppmv) < 0.50 U 3.9 1.600 441,000 31,600 9.2 < 0.50 U <0.50 U 4.1 0.93 < 0.50 U 234,000 Vinyl chloride 25 <1.6 U <7.8 <7.8 U <7.8 U U | <39 | U | <3.9 | U | <780 | U Chloroethane 75.200 <7.6 <7.6 U <1,500 U <19 <7.6 | U <3.8 U <3.8 U <1.5 11 <1.5 + U <1.5 U υ 11 1 <7.6 U <38 11 <760 4.8 $\mathbf{u}^{(1)}$ <1.700 U Acetone 31.200 6.0 <8.4 \mathbf{v} <8.4 U <21 U <8.4 U < 8.4 υ 28 j 17 10 6.2 <840 υ trans-1,2-Dichloroethene 3,680 <1.0 <1.0 υ <5.0 U <5.0 <1.000 <13 υ <5.0 < 5.0 U <25 U <2.5 U ! <2.5 <1.0 <500 U 1,1-Dichloroethane 25.600 < 0.99 < 0.99 U <4.9 U <4.9 <990 <12 U 49 <4.9 <25 <2.5 U <2.5 <490 U U | <2.5 cis-1.2-Dichloroethene 1.860 <5.0 υ <1.000 U <5.0 U U ! <500 U <1.0 <1.0 U < 5.0 U <13 < 5.0 U <25 | U <2.5 1.4 Chloroform 340 0.81 <4.1 U <4.1 | U <820 υ U <4.1 U U υ <2.0 U i 0.59 <410 U <20 <2.0 ,2-Dichloroethane 360 < 0.99 8.0 <990 <12 IJ U <2.5 U U **-0 99** < 4.9 l U < 4.9 < 49 U <25 U <2.5 U < 0.99 <490 ,1,1-Trichloroethane <3.7 36,800 7.0 1.1 < 3.7 <730 < 9.2 410 6.5 <18 110 210 13 <370 U Benzene 200 <1.3 <1.3 <6.3 <6.3 11 4,100 <16 U <6.3 <31 <3.1 <3.1 1,200 Carbon Tetrachloride 68 < 0.64 U U <3.2 U I <3.2 <640 U <3.2 U U U U < 0.64 < 8.0 U <32 <16 U <1.6 <0.64 U <320 <16 1,2-Dichloropropane 186 < 0.87 <4.3 U | <4.3 1 U υ <4.3 U <22 U U <2.2 U <0.87 U U U⁽¹⁾ U⁽¹⁾ 16 U(1) Trichloroethene 822 28 < 0.74 υί <3.7 U <3.7 U <740 U 6.2 4.9 5.7 U <1.9 U 2.9 <370 1,1,2-Trichloroethane 440 < 0.73 < 0.73 <3.7 U <3.7 | U <730 <370 U U U + < 9.2 U <3.7 | U < 3.7 U <18 U <1.8 U <1.8 ; U | <0.73 , U | U 21,200 **Foluene** <1.1 <1.1 <5.3 U <5.3 <1,100 <13 <5.3 <5.3 <27 | <2.7 U <2.7 <1.1 U U U U U 1,2-Dibromoethane 6 <0.52 | U < 0.52 <2.6 <2.6 <520 < 6.5 U <2.6 U <2.6 II I <13 U <1.3 U <1.3 < 0.52 <260 Tetrachloroethene 1,064 1.0 5.7 6.5 50 930 J (1.9 U 230 <590 21 360 L.L 2.8 <300 Ethylbenzene 49,000 < 0.92 <4.6 U <4.6 U <23 U <2.3 U <2.3 U 3,100 <12 <4.6 U <4.6 m- & p-Xylenes 14.280 <0.92 U <0.92 U <4.6 U <4.6 lυ 1.400 <12 υĪ <4.6 U <4.6 1 0 1 <23 U <2.3 U <2.3 U ! <0.92 U | <460 U o-Xylene <0.92 U <4.6 U <4.6 U <920 U <12 U U <23 <2.3 U <0.92 <4.6 U <4.6

(1) Due to the trace-level presence of the following compounds in associated field blanks or identified background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U". This was determined during data validation.

(2) The site boundary threshold level for methane is used for all comparisons.

(3) Well not sampled this quarter.

(4) Duplicates may have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume pptv = parts per million by volume pptv = parts per billion by volume d = lab duplicate pptv = Concentrations above site-boundary threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one half the soil gas threshold limits shown).



VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 7 of 9 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS WDI-VAPOR WELL - PROBE DEPTH (feet) **PARAMETERS THRESHOLD** LIMIT (ppbv) 51-30 | Qual | MP-1-05 | Qual | MP-1-15 | Qual | MP-2-05 | Qual Qual AMB 4/23 Qual 01-35d Qual 01-35fd Qual MP-2-15 05-29d Qual 18-36fd Qual 21-36d Qual 21-36fd Qual 22-35d Qual 26-35d Qual Nonmethane Organics as 1.800 5.2 92 methane (ppmv) Methane (ppmv) 12,500(2) 38,100 U [†] 73,700 < 0.50 U 644,000 1.6 $\cup U^{(1)}$ 10 | U(1) 550 1.2 U⁽¹⁾ 330 < 0.50 6.3 Vinyl chloride 25 <1.6 <1,600 U <1.6 <1.6 U <390 | U | U <7.8 + U <78 U <1.6 U 75.200 Chloroethane <76 U ! <15 | U <150 U i < 1.5 11 < 1.500 U i <1.5 5.9 <380 < 7.6 <7.6 U <76 U <170 U 3.7 <1,700 6.7 | U⁽¹⁾ <420 U 9.7 31,200 <84 44 U 4.0 8.8 <84 U Acetone <1.7 U trans-1,2-Dichloroethene 3.680 190 <1.0 <100 <1.0 <1,000 <1.0 <1.0 | U <250 <5.0 < 5.0 <50 <1.0 1,1-Dichloroethane 25,600 < 19 U < 0.99 U <99 U < 0.99 <990 U i < 0.99 U <0.99 U <250 | U <4.9 <4.9 U <49 1.7 cis-1,2-Dichloroethene 1.860 210 <1.0 U I <100 U <1.0 <1,000 U <1.0 ! U <1.0 <250 | U <5.0 U <5.0 U <50 U 77 Chloroform 340 П < 0.82 U <82 U <0.82 U <820 U < 0.82 U <0.82 U <200 U <4.1 U .2-Dichloroethane 360 < 0.99 U <0.99 U <49 <99 <990 U i < 0.99 + U <0.99 <250 U ! υ <4.9 U <49 U <4.9 U <1.0 ,1,1-Trichloroethane 36.800 6.4 <73 υ <0.73 <730 U < 0.73 < 0.73 <180 < 3.7 U <3.7 <37 1.0 200 <1.3 120 60,000 <1.3 <1.3 Ų Benzene < 6.3 U <6.3 <63 U 0.94 Carbon Tetrachloride 68 <32 υ U < 0.64 U U <0.64 U U < 0.64 <64 <640 < 0.64 <160 U <3.2 <3.2 U <32 U <0.64 U ,2-Dichloropropane 186 < 0.87 U <87 | U | < 0.87 <870 υ < 0.87 < 0.87 U <220 U <4.3 υ <4.3 U <43 U <0.87 U 130 | U⁽¹⁾ U U(1) υ Trichloroethene 822 < 0.74 <74 U 4.2 <740 < 0.74 < 0.74 <190 U 360 360 3,100 73 1,1,2-Trichloroethane 440 <37 < 0.73 U <73 11 <0.73 U <730 U < 0.73 T D <0.73 U <180 U <3.7 Toluene 21,200 <53 U <1.1 υ <110 U <1.1 1,600 1.3 U⁽¹⁾ <1.1 U <270 U < 5.3 U <5.3 U <53 U 3.1 1,2-Dibromoethane <26 < 0.52 U <52 < 0.52 <520 < 0.52 < 0.52 <2.6 U <26 <0.53 U 6 U U i U i <130 U I < 2.6 U Tetrachloroethene 1,064 3.8 <59 130 <0.59 6.0 17 190 <590 <150 17 26 U U <92 | U | < 0.92 680 < 0.92 U <0.92 | U Ethylbenzene 49,000 < 0.92 <230 U <4.6 U <4.6 11 i <46 U <0.92 U m- & p-Xylenes 14,280 <46 U < 0.92 U <92 U < 0.92 5,200 < 0.92 U <0.92 U 480 U <4.6 U <46 U <46 1.1 <46 U <0.92 U <92 U < 0.92 <920 U < 0.92 <0.92 U <230 U U | <4.6 | U <46 U <0.92 U

⁽¹⁾ Due to the trace-level presence of the following compounds in associated field blanks or identifed background samples, this compound should be considered "non-detect" and the reported positive results have been flagged "U". This was determined during data validation.

⁽²⁾ The site boundary threshold level for methane is used for all comparisons.

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VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 8 of 9 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS **PARAMETERS** WDI-VAPOR WELL - PROBE DEPTH (feet) **THRESHOLD** LIMIT (ppbv) 27-09d Qual 29-10d Qual 30-07d Qual 30-35fd Qual 31-10d Qual 32-08d Oual 32-18d Qual 34-23d Qual Qual: 38-10d Qual 39-07d Qual 41-20d Qual 41-20fd Qual 44-07d Qual Nonmethane Organics as 220 (4) 42 (4) methane (ppmv) Methane (ppmv) 12,500 9.7 13,000 <0.50 <0.50 690 υ : 30 <0.50 U <0.50 <0.50 U Vinyl chloride 25 <1.6 U 2.9 <1.6 U <1.6 U <1.6 <1.6 + U <3.9 <3.9 U U <1.5 U Chloroethane 75.200 <1.5 U <15 <15 <15 U <1.5 <1.5 U <3.8 U < 3.8 11 3.5 5.9 Acetone 31,200 <1.7 4.0 8.8 6.8 6.3 4.2 <4.2 U trans-1,2-Dichloroethene 3.680 <1.0 U 14 <1.0 <1.0 U <1.0 <1.0 <2.5 <2.5 U I, I-Dichloroethane 25,600 <0.99 U 0.82 < 0.99 U 0.97 <0.99 U - 11 <0.99 - B <2.5 U 17 ī <0.99 cis-1,2-Dichloroethene 1.860 <1.0 U !! <1.0 U <1.0 <1.0 <2.5 | U <2.5 U 0.54 J < 0.83 U < 0.82 0.83 Chloroform 340 U 0.98 0.91 3.9 <2.0 U 1.6 j ,2-Dichloroethane 360 < 0.99 U <1.0 i U < 0.99 <0.99 <0.99 < 0.99 < 0.99 <2.5 <2.5 υ U U I 1,1,1-Trichloroethane 36,800 390 1.9 8.1 4.9 < 0.73 22 51 υ U <1.3 U <1.3 200 <13 <1.3 <1.3 U Benzene <13 <13 <3.1 U 2.3 Carbon Tetrachloride <0.64 U < 0.64 U <0.64 U <0.64 U <0.64 U 68 <0.64 U < 0.64 U <1.6 U <1.6 U < 0.87 <0.87 1,2-Dichloropropane 186 <0.87 U U U < 0.87 II i <0.87 U <0.87 < 0.87 U <2.2 U <2.2 U Trichloroethene 822 < 0.74 42 < 0.74 U < 0.74 U < 0.74 <0.74 < 0.74 U <1.9 U <1.9 υ 1,1,2-Trichloroethane 440 < 0.73 <0.74 U < 0.73 U < 0.73 < 0.73 U < 0.73 < 0.73 Ü <1.8 <1.8 i U Toluene 21,200 1.1 11 1.1 0.71 <11 U <1.1 Ü <2.7 | U | 5.5 <1.1 1,2-Dibromoethane 6 < 0.52 U < 0.53 < 0.52 < 0.52 U < 0.52 U <1.3 υ <1.3 Tetrachloroethene 1.064 1.5 41 16 1.4 1.1 2.0 16 1.1 | J 49.000 <0.92 < 0.92 <2.3 υ Ethylbenzene < 0.92 **40 92** <0.92 <0.92 U U U U < 0.92 U <2.3 | U | m- & p-Xylenes 14,280 0.82 <0.92 U 0.68 < 0.92 <0.92 U <0.92 υi <0.92 U <2.3 U <0.92 U <0.92 U <0.92 U <0.92 U o-Xylene 14,280 <0.92 U < 0.92 U < 0.92 U <2.3 U 1.6

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VAPOR WELL ANALYTICAL DATA FOR APRIL 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 9 of 9 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS **THRESHOLD** WDI-VAPOR WELL - PROBE DEPTH (feet) **PARAMETERS** LIMIT (ppbv) 51-30fd Qual 51-30fdd Qual MP-2-05d Qual MP-2-15d Qual AMB 4/23d Qual Nonmethane Organics as 1,900 1.900 52 methane (ppmv) Methane (ppmv) 12,500° 38,300 38,000 < 0.50 <1.600 U Vinyl chloride 74) Chloroethane υ 75,200 <76 U <1,500 U <1.5 31,200 <1,700 U 3.8 Acetone trans-1,2-Dichloroethene 200 <1,000 U <1.0 3,680 U ,1-Dichloroethane <0.99 25,600 <49 U <990 U cis-1,2-Dichloroethene 1.860 210 <1,000 <1.0 υ <41 U Chloroform <820 U < 0.82 U 340 ,2-Dichloroethane 360 <49 U <990 <0.99 U <37 L U <730 U 1,1,1-Trichloroethane 36.800 < 0.73 U 88 U⁽⁴⁾ Benzene 59,000 <1.3 200 U arbon Tetrachloride <32 U <640 < 0.64 68 υ <43 U U 1,2-Dichloropropane 186 <870 < 0.87 140 U⁽⁴⁾ <740 U U Trichloroethene_ 822 < 0.74 1,1,2-Trichloroethane 440 <37 U <730 U < 0.73 U Toluene 21,200 <53 U 1,600 1,2-Dibromoethane <520 < 0.52 6 <26 U U U Tetrachloroethene 1,064 <30 U <590 < 0.59 U <46 U Ethylbenzene 49,000 680 < 0.92 U <46 U m- & p-Xylenes 14,280 5,100 <0.92 U o-Xylene <46 U <920 U < 0.92 U

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TABLE 4.15 VAPOR WELL ANALYTICAL DATA FOR JULY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

Page	l of l	
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	SOIL GAS										WELI	. IDENTIF	ICATIO	N AND AN	NALYTI	CAL RES	ULTS (p	bv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-V	APOR WE	LL - PRO	OBE DEP	TH (feet)												
	LIMIT (ppbv)	01-35	Qual	02-35	Qual	03-35	Qual	04-23	Qual	05-29	Qual	06-34	Qual	08-35	Qual	10-35	Qual:	11-35	Qual	12-34	Qual	13-31	Qual	14-35	Qual	16-34	Qual !	17-35	Qual
Nonmethane Organics as		110	i	120	i	160		21,000		72	-	84		48		180		190		63	I i	240	1	490		79		94	
methane (ppmv)	1	110		120	į	100		21,000	į	72	1	04	i	40		100	1	170	1	0.5		240		770	1	17		74	
Methane(ppmv)	12.50011	0.76	į	130	1	9.050		173,000		< 0.50	U	1,300	i	2.9	j	7,060	1	15,100	1 :	< 0.50	U ·	7,500		110		0.63	1 1	< 0.50	U
Vinyl chloride	25	<1.6	i U	<1.6	U	<3.9	U	<390	l U ;	<1.6	U	<1.6	U	<1.6	; U !	160	1	6.6	1	<1.6	U	37	1	<39	U	<1.6	U	<1.6	U
Chloroethane	75.200	<1.5	· U	<1.5	U	<3.8	U	<380	U	<1.5	U	<1.5	U	<1.5	U	<3.8	U	<3.8	U	<1.5	U	<3.8	U	<38	U	<1.5	υ	<1.5	υ
Acetone	31,200	2.8		<1.7	υ	<4.2	υ	<420	U	3.1		<1.7	υ	3.4		<4.2	U	<4.2	U	<1.7	U	<4.2	U	<42	υ	2.2		<1.7	υ
trans-1,2-Dichloroethene	3.680	<1.0	υ	<1.0	υ	<2.5	jυ	<250	U	<1.0	υ	<1.0	U	<1.0	U	<2.5	U	<2.5	υ	<1.0	υ	10	1	<25	υ	<1.0	U	<1.0	U
1,1-Dichloroethane	25,600	<0.99	U	<0.99	U	<2.5	υ	<250	U	<0.99	i U	<1.0	U	<0.99	U	90		<2.5	U	<1.0	U	<2.5	l U i	17	J	3.1	i	<1.0	υ
cis-1,2-Dichloroethene	1.860	<1.0	U	<1.0	U	<2.5	U	<250	; U +	<1.0	U	<1.0	U	<1.0	U	110	1	<2.5	U	<1.0	U	52		<25	υ	<1.0	U ;	<1.0	υ
Chloroform	340	< 0.82	! U	< 0.82	į U	<2.0	U	<200	U	< 0.82	υ	< 0.83	U	< 0.82	U	<2.0	i U	<2.1	: U 1	< 0.83	U	<2.0	. U :	<20	U	4.5		< 0.83	U
1,2-Dichloroethane	360	<0.99	υ	< 0.99	U	<2.5	U	<250	U	< 0.99	U	<1.0	U	< 0.99	U	<2.5	l U i	<2.5	U	<1.0	U	<2.5	U	<25	U	<1.0	U	<1.0	U
1,1,1-Trichloroethane	36,800	<0.73	U	<0.73	U	<1.8	U	<180	U :	<0.73	U	< 0.74	U	< 0.73	U	<1.8	U	<1.9	U	2.6)	<1.8	U	<18	U	8.4		310	
Benzene	200	<1.3	U	<1.3	U	3.4		890	i i	<1.3	. U	0.87]	<1.3	U	<3.1	U	<3.1	U	<1.3	U	3.7	1	<31	U	0.83	J	<1.3	υ
Carbon Tetrachloride	68	<0.64	U	< 0.64	U	<1.6	U	<160	U	<0.64	U	<0.64	U	< 0.64	· U	<1.6	U !	<1.6	U	< 0.64	U	<1.6	U	<16	υi	< 0.64	U	<0.64	U
1,2-Dichloropropane	186	<0.87	U	< 0.87	U	<2.2	U	<220	υ	<0.87	U	< 0.87	U	<0.87	U	<2.2	U	<2.2	U	< 0.87	U	<2.2	U .	17	j T	< 0.87	υ	<0.87	Ü
Trichloroethene	822	<0.74	U	<0.74	U	4.2	!	<190	U	2.9		< 0.75	U	1.1		<1.9	U	<1.9	U	1.3		66	T T	<19	υi	270		9.1	
1,1,2-Trichloroethane	440	< 0.73	U	<0.73	υ	<1.8	U	<180	U	<0.73	υ	<0.74	U	<0.73	υ	<1.8	U	<1.9	U	< 0.74	υ	<1.8	υ	<18	U	< 0.74	U	<0.74	υ
Toluene	21,200	4.6		2.3	1	2.3	J	<270	U	2.3		4.0	i :	5.2		7.7		4.6	1 1	15		4.4		<27	U	4.8	İ	6.0	
1,2-Dibromoethane	6	<0.52	U	<0.52	U	<1.3	U	<130	U	<0.52	U	< 0.53	U	< 0.52	U	<1.3	U	<1.3	U	< 0.53	U	<1.3	U	<13	U	< 0.53	U	<0.53	U
Tetrachloroethene	1,064	7.4		0.86		26	ì	<150	υ	19		j.7	1 :	2.6		1.1	J	3.3		28		1.3	J	40		6.6		14	
Ethylbenzene	49,000	<0.92	υ	< 0.92	υ	<2.3	υ	<230	<u> </u> υ	<0.92	U	<0.92	l U	0.74	J	<2.3	υ	<2.3	U	1.1	1	<2.3	U	390		<0.92	U	0.93	
m- & p-Xylenes	14,280	1.2		1.6		2.4		<230	I U I	1.3		2.0		3.1		3.8		2.1	J	4.9		2.9	1	530		2.0		3.9	
o-Xylene	14,280	<0.92	U	0.66	J	<2.3	U	<230	U	<0.92	U	0.89	J	1.3	<u> </u>	1.9	j	<2.3	U	2.8		1.4	J	890		0.81	J	1.7	

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.(2) Well not sampled this quarter.

ppmv = parts per million by volume ppbv = parts per billion by volume

Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

TABLE 4.15

VAPOR WELL ANALYTICAL DATA FOR JULY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) **SOIL GAS PARAMETERS** WDI-VAPOR WELL - PROBE DEPTH (feet) THRESHOLD LIMIT (ppbv) 18-36 + Qual 20-35 Qual 21-36 Qual 22-35 Qual Qual 25-35 Qual 26-35 Qual Qual 27-19 Qual 27-35 Qual 28-10 | Qual | 28-25 | Qual | 29-10 | Qual 23-36 Qual 24-35 27-09 Nonmethane Organics as 780 82 42 91 120 81 160 110 5.300 130 28 65 47 methane (ppmv) 12,500" Methane (ppmv) 2.4 1.4 6.9 2.1 2.100 < 0.50 U : 65,000 1.3 8.6 2.7 < 0.50 0.85 < 0.50 U i 1.2 Vinyl chloride 25 <1.6 <1.6 <1.6 <1.6 U <1.6 <16 U <1.6 <1.6 26 <1.6 <99 <1.6 U · <16 U <1.6 75,200 Chloroethane <15 <1.5 <1.5 <1.5 <1.5 <1.5 <96 <1.5 <1.5 2.7 <1.5 U Acetone 31,200 U 8.8 1.9 4.8 <1.7 U 2.5 <110 U 2.6 5.1 9.3 <1.7 trans-1,2-Dichloroethene 3,680 U υ <1.0 U <10 - EJ <10 <1.0 17 38 <10 <64 <10 <10 | 11 <10 <10 11 <10 <10 <10 ,1-Dichloroethane 25.600 < 0.99 U \ <0.99 3.1 15 Ui <62 2.3 2.1 < 0.99 <0.99 U < 0.99 cis-1,2-Dichloroethene 1.860 130 <1.0 U <1.0 υ <10 U <1.0 U 1.1 5.6 <1.0 U <64 47 <1.0 U : <1.0 U : U <1.0 <1.0 Chloroform 340 < 0.82 1.8 6.6 1.4 < 0.82 U <52 < 0.83 < 0.82 U <0.82 < 0.82 1.7 < 0.82 360 ,2-Dichloroethane < 0.99 U < 0.99 < 0.99 < 0.99 < 0.99 U <62 U <1.0 U < 0.99 < 0.99 < 0.99 < 0.99 < 0.99 < 0.99 ,1,1-Trichloroethane 36,800 < 0.73 U 5.3 0.95 < 0.73 IJ 0.71 4.2 23 24 0.62 U <46 < 0.73 48 200 <1.3 υ U 0.94 <1.3 U Benzene <78 <1.3 arbon Tetrachloride 68 <6.4 U < 0.64 U < 0.64 U < 0.64 U ! < 0.64 U < 0.64 U <40 υ < 0.64 U < 0.64 U <0.64 U | <0.64 | U <0.64 U < 0.64 < 0.64 U ,2-Dichloropropane 186 <8.7 <0.87 < 0.87 < 0.87 < 0.87 U < 0.87 U <55 < 0.87 < 0.87 < 0.87 <0.87 <0.87 < 0.87 < 0.87 υ U richloroethene 822 U 3.4 350 850 690 4.4 <47 Ü 33 < 0.74 < 0.74 0.78 < 0.74 < 0.74 U ,1,2-Trichloroethane 440 <0.73 < 0.73 U <7.4 U U < 0.73 < 0.73 U < 0.73 <46 < 0.74 < 0.73 < 0.73 U <0.73 U < 0.73 < 0.73 < 0.73 U 21,200 3.2 4.3 3.5 5.7 2.4 1.9 3.1 3.3 oluene <66 U 6.7 2.6 ,2-Dibromoethane < 5.3 U <0.52 < 0.52 < 0.52 < 0.52 < 0.52 Uį <33 U < 0.53 < 0.52 < 0.52 U <0.52 U <0.52 U <0.52 < 0.52 Tetrachloroethene 1.064 4.1 100 17 83 7.2 <37 H < 0.59 _____ 0.68 73 19 24 13 1.7 Ethylbenzene 49,000 45 0.59 0.78 < 0.92 < 0.92 <0.92 < 0.92 < 0.92 1.2 51 < 0.92 < 0.92 14,280 m- & p-Xylenes 190 2.6 3.3 1.9 4.7 1.7 5.4 1.2 1.3 0.71 J 2.4 1.8 <58 U 1.7 o-Xylene <9.2 U 1.1 1.5 0.84 2.1 0.69 <58 U 2.4 <0.92 U <0.92 U <0.92 U I.I 0.73 < 0.92

ppmv = parts per million by volume pptv = parts per billion by volume pptv = parts per

Page 2 of 10

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

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TABLE 4.15

VAPOR WELL ANALYTICAL DATA FOR JULY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 3 of 10 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS **PARAMETERS** THRESHOLD WDI-VAPOR WELL - PROBE DEPTH (feet) LIMIT (ppbv) Qual | 31-30 | Qual | 32-08 | Qual 29-23 Qual 29-35 Qual 30-07 Qual 30-23 | Qual 30-35 Qual 31-10 32-18 Qual 32-35 | Qual 33-10 | Qual 33-35 | Qual 34-10 | Qual | 34-23 | Qual Nonmethane Organics as 52 140 150 32 110 methane (ppmv) lethane (ppmv) 12,500" <0.50 0.71 1,300 3,300 <0.50 <0.50 < 0.50 3.1 1.5 U 1.5 U < 0.50 U 2.1 3.0 inyl chloride <1.6 <1.6 <1.6 1.3 <1.6 U <1.6 U <1.6 <1.6 υ <1.6 <1.6 <1.6 <1.6 <1.6 75.200 <1.5 U <1.5 ΙU <1.5 U <1.5 <1.5 U J <1.5 U <1.5 | U | U l U <1.5 U I U <1.5 U <1.5 <1.5 U hloroethane <15 <1.5 <15 Acetone 31,200 2.2 2.4 2.6 <1.7 <1.7 U <1.7 2.4 2.7 trans-1,2-Dichloroethene 3.680 <1.0 U <1.0 U ! <1.0 1.3 6.6 <1.0 υ <1.0 U <1.0 U <1.0 U <1.0 U <1.0 υi <1.0 U <1.0 U <1.0 ,1-Dichloroethane 25,600 < 0.99 U < 0.99 2.6 <1.0 <1.0 <1.0 U <1.0 < 0.99 < 0.99 < 0.99 < 0.99 U <0.99 < 0.99 <0.99 is-1,2-Dichloroethene 1,860 <1.0 340 <0.82 | U 1.5 0.54 < 0.83 < 0.83 l U < 0.83 U 2.3 1.1 Chloroform < 0.83 1.1 0.5 0.51 1.8 < 0.82 < 0.82 ,2-Dichloroethane 360 <0.99 < 0.99 <1.0 <1.0 <1.0 U <1.0 < 0.99 U < 0.99 U < 0.99 < 0.99 <0.99 ,1,1-Trichloroethane 36,800 <0.73 U <0.73 U 360 1.9 <0.74 υ 2.0 0.55 9.4 5.6 2.8 120 1.8 130 4.7 200 <1.3 <1.3 Benzene <13 <1.3 <1.3 <13 <13 <1.3 <13 <13 <13 <1.3 arbon Tetrachloride 68 < 0.64 < 0.64 < 0.64 < 0.64 < 0.64 U < 0.64 < 0.64 < 0.64 < 0.64 < 0.64 < 0.64 U < 0.64 U < 0.64 ,2-Dichloropropane 186 <0.87 U <0.87 U <0.87 U < 0.87 U ! < 0.87 ļυ < 0.87 U < 0.87 U < 0.87 U < 0.87 U < 0.87 U < 0.87 U < 0.87 U < 0.87 Ui <0.87 U 822 Trichloroethene < 0.74 1.0 10 23 < 0.75 4.9 <0.74 U <0.74 0.65 0.94 < 0.74 υ <0.74 U ,1,2-Trichloroethane 440 < 0.73 U <0.73 U <0.74 U <0.74 U < 0.74 < 0.74 U < 0.74 υ <0.73 U < 0.73 U < 0.73 U ; <0.73 | U | <0.73 | U <0.73 U <0.73 U 21,200 2.4 2.2 4.7 2.4 Coluene 2.6 2.0 2.2 3.3 1.6 1.2 1.1 2.1 1.7 3.0 ,2-Dibromoethane < 0.52 < 0.52 < 0.53 < 0.53 < 0.53 < 0.53 < 0.53 < 0.52 < 0.52 < 0.52 < 0.52 < 0.52 < 0.52 <0.52 U 1,064 16 Tetrachloroethene 4.8 3.1 55 67 32 0.72 0.97 1.0 1.5 2.1 2.3 9.2 Ethylbenzene 49,000 < 0.92 < 0.92 < 0.92 0.91 <0.92 0.93 0.64 < 0.92 <0.92 U < 0.92 < 0.92 <0.92 < 0.92 < 0.92 14,280 1.2 4.1 0.77 1.3 m- & p-Xylenes 3.9 1.3 2.8 1.2 0.93 1.6 14,280 <0.92 U <0.92 U <0.92 U <0.92 U U <0.92 U o-Xylene <0.92 U 1.8 < 0.92 U 1.9 1.2 < 0.92 U | < 0.92 <0.92 | U < 0.92

TRC
Customer-Focused Solutions

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

TABLE 4.15

VAPOR WELL ANALYTICAL DATA FOR JULY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

																												Page	e 4 of 10
	SOIL GAS										WEL	L IDENTI	FICATIO	N AND A	NALYTI	CAL RES	SULTS (p)	pbv, unless	noted)										$\neg \neg$
PARAMETERS	THRESHOLD													APOR WE									-						
	LIMIT (ppbv)	34-40	Qual	35-10	Qual	35-38	Qual	36-10	Qual	36-30	Qual	37-10	Qual	37-30	Qual	38-10	Qual	38-34	Qual	39-07	Qual	39-30	Qual	40-10	Qual	40-25	Qual	41-07	Qual
Nonmethane Organics as		110		67	1	95	1 1	59	1 1	98		50		100	!	71		740	1	78		83	i	78		79	i	110	
methane (ppmv)		110				, ,,,		.,,				50						740	i		<u> </u>		<u>i</u>		<u> </u>	,,,			İ
Methane (ppmv)	12,500°	1.4		1.0	1	7.8		2.0	i T	< 0.50	U	3.9	1	950		2.6		260	!	1.0		0.85	t	18,300		<0.50	U	< 0.50	U
Vinyl chloride	25	<1.6	υ	<1.6	U	<1.6	. U	<1.6	U	<1.6	U	<1.6	; U	3.7		<1.6	U	<7.9	U	<7.9	U	<1.6	U	<1.6	U	<1.6	υ	<1.6	U
Chloroethane	75,200	<1.5	U '	<1.5	U	<1.5	U	<1.5	U	<1.5	U	1.3	; J	<1.5	U	<1.5	U	<7.6	U	<7.6	U	<1.5	: U	<1.5	U	<1.5	U !	<1.5	U
Acetone	31,200	3.4		5.1		2.3	i !	5.0		2.0	i į	8.6	!	<1.7	i U i	6.1	! !	<8.4	U	6.5	j	4.5	1	<1.7	U	5.0		3.4	1
trans-1,2-Dichloroethene	3,680	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	υ	<5.1	U	<5.1	i U	<1.0	υ	<1.0	U	<1.0	υ	<1.0	U
1,1-Dichloroethane	25.600	<0.99	υ	<1.0	i U	2.1		<1.0	U I	<1.0	U	1.3		<1.0	<u>i</u> U i	<1.0	U	<5.0	U	17	i l	0.95	i J	2.4		< 0.99	U	<0.99	υ_
cis-1,2-Dichloroethene	1.860	<1.0	U :	<1.0	U	<1.0	U	<1.0	: U į	<1.0	U .	<1.0	l U	<1.0	; U :	<1.0	U	<5.1	U	<5.1	U	<1.0	U	1.9		<1.0	U	<1.0	U
Chloroform	340	2.0	i	0.67	j	43		< 0.83	U	3.2		< 0.83	ı U ;	<0.83	U	< 0.83	υ	<4.1	U	<4.1	U	< 0.83	l U	0.76	J	< 0.82	U	< 0.82	U
1,2-Dichloroethane	360	<0.99	U	<1.0	U	3.5	ii	2.1		<1.0	U	<1.0	Ü	<1.0	l U	<1.0	U	< 5.0	υ	<5.0	υ	<1.0	U	4.1		< 0.99	U	< 0.99	U
1,1,1-Trichloroethane	36,800	0.53	J :	19	<u>:</u> ;	4.9	; ;	3.1		< 0.74	U	320		1.9	1.	68	i	<3.7	i U	240		50	1	18	j	2. J		23	
Benzene	200	<1.3	U	<1.3	U	1.6	!	0.94	J ;	<1.3	U	1.6		0.8	j	0.84	J	<6.3	U	<6.3	. U i	0.91	ļ j	28		<1.3	U	<1.3	U
Carbon Tetrachloride	68	<0.64	U	< 0.64	U	< 0.64	U	< 0.64	U	< 0.64	υ	< 0.64	U	<0.64	ี บ :	< 0.64	U	<3.2	U	<3.2	U	< 0.64	U	<0.64	υ	< 0.64	U I	< 0.64	U
1,2-Dichloropropane	186	<0.87	U	< 0.87	U	< 0.87	U	< 0.87	U	< 0.87	U	< 0.87	U	<0.87	U	< 0.87	U	<4.4	U	<4.4	υ	< 0.87	U	<0.87	U_	< 0.87	U	< 0.87	U_
Trichloroethene	822	4.1		67	;	1,200		< 0.75	U	<0.75	U	< 0.75	U	< 0.75	U	< 0.75	U	<3.8	υ	<3.8	υ_:	< 0.75	U	1.1	!]	4.6		< 0.74	U
1.1,2-Trichloroethane	440	< 0.73	U	< 0.74	U	< 0.74	U	< 0.74	U	< 0.74	U	< 0.74	U	< 0.74	U	< 0.74	U	<3.7	U	<3.7	U	< 0.74	U	< 0.73	U_	< 0.73	U	< 0.73	U
Toluene	21,200	2.7		3.7		2.6		5.6		3.4	1	7.3		3.5	1 .	5.3		3.6	J	4.1	J	7.2	İ	4.1		3.5	ì	2.5	
1,2-Dibromoethane	6	<0.52	U	< 0.53	i U	< 0.53	i U j	< 0.53	U	< 0.53	į U I	< 0.53	U	< 0.53	U	< 0.53	U	<2.6	U	<2.6	U	< 0.53	U	<0.52	U	< 0.52	U	< 0.52	υ
Tetrachloroethene	1,064	6.3		3.6		42		1.3		2.1	i i	0.60	1	1.3		1.5		3.0		9.5		9.5		3.9	[[150		34	
Ethylbenzene	49.000	<0.92	υ	< 0.92	U	<0.92	U	1.1		0.65	J	0.96		0.57	J	0.97	J	<4.6	υ	<4.6	υ	1.2	-	1.2		<0.92	U	< 0.92	U
m- & p-Xylenes	14,280	1.4		1.4		1.2		4.6		2.8		3.7		2.2		3.9		<4.6	U	<4.6	U	4.8		4.6		2.5		0.99	
o-Xylene	14,280	<0.92	U	< 0.92	U	< 0.92	U	2.1	1	1.3	1	1.3		0.87	J	1.6		<4.6	U	<4.6	U	2.0	-	2.1		1.1		<0.92	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

TABLE 4.15

VAPOR WELL ANALYTICAL DATA FOR JULY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 5 of 10 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS **PARAMETERS** THRESHOLD WDI-VAPOR WELL - PROBE DEPTH (feet) Qual 45-12 Qual 45-22 LIMIT (ppbv) 41-20 | Qual | 42-10 Qual 42-30 43-09 43-19 44-07 Oual Qual Qual 43-32 Oual Qual 44-16 Qual 44-30 Qual 45-30 Qual | 46-07 Qual 46-15 Qual Nonmethane Organics as 140 79 34,000 95 89 45 410 440 14,000 1,800 methane (ppmv) 12,500" 4.200 <0.50 U 22,000 23,000 1,600 7,260 213,000 90,200 27.800 <0.50 Methane (ppmv) <0.50 U 2.0 2.9 17,200 υ 1.7 55 Vinyl chloride <1.6 U <1.6 U <1.6 υ <1.6 240 280 <3.9 59 87 <39 <1.6 U hloroethane 75,200 <1.5 U <1.5 U <1.5 U < 7.6 <7.6 <3.8 U <1.5 <3.8 U : <0.76 U : < 0.38 <38 U <1.5 ! U 4.1 31,200 1.9 7.7 < 8.4 U <8.4 U < 0.42 <42 ! U Acetone 3.4 2.9 U <4.2 U I <1.7 U <4.2 D : < 0.84 < 1.7 rans-1,2-Dichloroethene 3.680 <1.0 <1.0 <1.0 <1.0 4.7 <2.5 <1.0 <2.5 10 5.6 <25 <1.0 <1.0 <5.0 3.4 ,1-Dichloroethane 25.600 < 0.99 U < 0.99 U < 0.99 <1.0 11 <5.0 U I 3.4 25 < 0.50 < 0.25 <25 2.9 cis-1.2-Dichloroethene 1.860 <1.0 i U <1.0 <1.0 U <1.0 71 180 <2.5 <1.0 <2.5 1.4 <25 <1.0 Chloroform 340 < 0.82 0.85 <4.1 <4.1 < 0.83 < 0.41 < 0.21 <21 0.87 <2.1 ,2-Dichloroethane 360 < 0.99 <0.99 <5.0 < 0.25 < 0.99 0.1>< 5.0 U U < 2.5 U <1.0 <2.5 U 1 < 0.50 U <25 1,1-Trichloroethane 36,800 < 0.73 < 0.73 6.7 <3.7 U <3.7 78 64 < 0.37 < 0.19 <19 280 68 <1.9 Benzene 200 <1.3 <1.3 <1.3 12 <3.1 0.98 <3.1 9.9 4.7 <31 <1.3 Carbon Tetrachloride 68 U U υ <3.2 υ U U υ < 0.64 U < 0.64 U < 0.64 < 3.2 <1.6 < 0.64 <1.6 U I < 0.32 <0.16 <16 < 0.64 ,2-Dichloropropane 186 < 0.87 < 0.87 <4.4 <2.2 U <0.87 | U | < 0.87 < 0.22 <22 Trichloroethene 822 <0.74 U <0.74 U <0.74 U 3.8 3.1 <3.8 U : <1.9 U <0.75 U <1.9 U 0.26 1 <0.19 U ! <19 [1] 0.86 16 .1.2-Trichloroethane 440 <0.73 < 0.74 < 3.7 Uİ <3.7 <1.9 U ! < 0.74 < 0.73 < 0.73 < 0.73 <1.9 U < 0.37 < 0.19 <19 | U < 0.73 21,200 2.9 7.8 3.7 6.9 3.0 <27 2.8 Foluene_ < 0.52 1,2-Dibromoethane < 0.53 <2.6 <1.3 υ < 0.52 < 0.52 <2.6 U < 0.53 <1.3 U < 0.26 < 0.13 <13 U < 0.52 Tetrachloroethene 1,064 14 6.2 9.3 16 4.9 <3.0 1.3 < 0.60 υ <1.5 < 0.30 < 0.15 <15 160 Ethylbenzene 49,000 <0.92 U <0.92 U < 0.92 υ¦ < 0.92 <4.6 U <4.6 υı <2.3 0.76 U 0.97 U < 0.23 υ <23 U 5.2 <0.92 U 14,280 m- & p-Xylenes 1.1 2.3 4.6 6.0 9.0 2.3 2.3 3.6 J 3.9 3.1 < 2.3 U < 0.23 <23 U 1.5 <4.6 4.2 2.6 < 0.92 o-Xylene 0.91 J 1.0 0.93 <4.6 υ ļ U 4.1 <2.3 υl 0.52 <23

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

TABLE 4.15

VAPOR WELL ANALYTICAL DATA FOR JULY 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 6 of 10 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS **PARAMETERS** THRESHOLD WDI-VAPOR WELL - PROBE DEPTH (feet) 50-08 Qual LIMIT (ppbv) 46-27 Qual 47-08 Qual 47-18 47-30 Qual 48-35 Qual 50-18 51-18 Qual Qual Qual 48-08 Qual 48-17 49-10 Qual 49-18 Qual 49-30 Qual Qual 50-35 Qual Nonmethane Organics as 110 180 130 840 120 9.300 40.000 160 1,900 methane (ppmv) 12,500" 592,000 <0.50 U 2 300 258,000 27,500 241,000 Methane (ppmv) 1.9 5.000 5.4 20 Vinyl chloride <1.6 <1.6 U <1.6 750 <780 <20 <1.6 <1.6 U <1.6 <200 <1.6 Chloroethane 75.200 U ' <1.5 <1.5 U <1.5 U <190 U <760 υ ! <19 U <1.5 U 1.0 J <1.5 U <190 2.3 31.200 6.5 5.7 <210 U Acetone <1.7 <210 17 <840 84 47 11 13 <21 trans-1,2-Dichloroethene 3.680 <1.0 <1.0 <1.0 <1.0 <130 <500 <13 <1.0 <1.0 <1.0 <130 υ 25,600 1,1-Dichloroethane < 0.99 U < 0.99 < 0.99 U < 0.99 U <120 U <490 U <12 10 0.78 0.66 <120 U cis-1,2-Dichloroethene 1.860 <1.0 <1.0 <1.0 <1.0 υ 0.99 <1.0 <130 100.0 < 500 <13 11 <1.0 hloroform 340 0.55 < 0.82 < 0.82 < 0.82 <100 <100 <10 < 0.82 < 0.82 ,2-Dichloroethane υ 360 < 0.99 <0.99 3.6 < 0.99 U <120 U <400 U <12 U < 0.99 U < 0.99 U < 0.99 U <120 ,1,1-Trichloroethane 36.800 6.9 < 0.73 < 0.73 < 0.73 U <370 <9.2 42 <0.73 <92 υ <92 U 5.1 U Benzene 200 <1.3 1.2 <1.3 820 4,200 0.93 2,900 Carbon Tetrachloride U U 68 < 0.64 < 0.64 < 0.64 U < 0.64 U <80 U <320 <8.0 < 0.64 < 0.64 U < 0.64 <80 ,2-Dichloropropane < 0.87 < 0.87 < 0.87 <0.87 <110 < 0.87 < 0.87 <110 U <11 < 0.87 Trichloroethene 822 21 < 0.74 U 1.2 1.7 <93 U <370 <9.3 U 4.9 13 7.7 <93 U .1.2-Trichloroethane <0.73 440 < 0.73 < 0.73 < 0.73 < 0.73 < 0.73 <92 <92 <370 <9.2 < 0.73 U U 'oluene 21,200 2.6 4.2 <130 <530 4.7 2.8 3.1 <130 3.1 <13 1,2-Dibromoethane < 0.52 < 0.52 < 0.52 < 0.52 U < 0.52 U < 0.52 <65 <65 <260 U <6.5 U Tetrachloroethene 1,064 190 1.4 3.8 21 <74 U <300 U 110 350 290 <74 Ethylbenzene 49,000 <0.92 U 0.61 J < 0.92 0.68 5,400 7.5 0.70 < 0.92 U < 0.92 810 2.2 410 m- & p-Xylenes 14,280 2.6 1.4 1.9 <120 i U l 1,800 <12 U 3.1 2.1 2.3 0.79 190 o-Xylene 0.78 J 1.1 <120 ŪUI <12 | U | 1.3



⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

TABLE 4.15

(Continued)

																												ra	age 7 of 10
	SOIL GAS											WEL	LIDENTII	FICATIO	N AND A	NALYT	ICAL RES	ULTS (p	pbv, unless	noted)									
PARAMETERS	THRESHOLD													WDI-V	APOR WE	ELL - PR	OBE DEP	TH (feet)				_			_				
	LIMIT (ppbv)	51-30	Qual	52-	10 . Ç	Qual	52-19	Qual	52-30	Qual	53-10	Qual	53-20	Qual		,			MP-1-15	Qual	MP-2-05	Qual	MP-2-15	Qual	03-35d	Qual	04-23fd	Qual 06-34fd	d Qual
Nonmethane Organics as		390	İ	240	n :		120	! i	98	1 1	660		190		140	1	100		2,200	i	70	-	7,400	;	170	1 1	21,000 :	80	
methane (ppmv)		.,,,		- "		i	120	1 1				l i	170	i		j	100	·		1	1		; /,+00		170	1	21,000		
Methane (ppmv)	12.500%	78	1	32	<u> </u>	i_	<0.50	υ	<0.50	U	8.400	! !	2.100		910	í	2.3		680,000		4.0		743,000		9.140	! !	170,000	1,300	
Vinyl chloride	25	4.4		<7.	8	υ	<1.6	U	<1.6	U	14	j J	21		7.0	j	<2.6	U	<470	lυ	<1.6	U	<780	· U	(3)		<390	U <1.6	່ ບ
Chloroethane	75,200	<3.8	U	<7.	6 !	U 1	<1.5	U	<1.5	1 U i	<10	U '	<7.6	U	<7.6	υ	<2.5	i U	<450	U	<1.5	υ	<760	U	!	i i	<380	U <1.5	υ
Acetone	31,200	<4.2	U	14	1		6.0	1	4.1	1 1	<17	U	<8.4	U	<8.4	!υ	2.6	J	<510	U	1.9		<840	U			<420	U <1.7	υ
trans-1,2-Dichloroethene	3.680	73		<5.0	0	U	<1.0	υ :	<1.0	U	9.7	! j !	56	1	18	1	<1.7	U	<300	U	<1.0	U	<500	! บ :	ļ.		<250	U <1.0	U
1,1-Dichloroethane	25,600	15	L	40) j	j	140	1 ;	27		13		27		23	!	<1.6	U :	<300	U	<0.99	υ	<490	U	!	1	<250	U <1.0	l U
cis-1,2-Dichloroethene	1,860	160	ļ	i <5.0	0	U	3.9	1	<1.0	U	88	1	160		. 82	ł	<1.7	υ	<300	υ	<1.0	U	<500	U	!		<250	U <1.0	U
Chloroform	340	<2.0	U	<4.	1	U	< 0.82	U	0.76	J	<8.3	U	<4.1	, U	3.6	J	<1.4	U	<250	lυ	<0.82	U	<410	υ	İ		<200 +	U <0.83	l U
1,2-Dichloroethane	360	<2.5	U	<4.9	9 i	υ i	< 0.99	υ	<0.99	U	<10.0	U	<5.0	υ	<5.0	lυ	<1.6	U	<300	l U	<0.99	U	<490	U	ĺ	i i	<250	U <1.0	U
1,1,1-Trichloroethane	36,800	<1.8	υ	<3.	7	U	0.7	J	0.49	J	7.1	J	<3.7	υ	<3.7	į U	12	į !	<220	U	<0.73	U	<370	U	:		<180	U <0.74	U
Benzene	200	27	!	<6	3	U	2.4		<1.3	υ	16		<6.3	U	<6.3	U	<2.1	: U	410	ļ.	<1.3	υ	20,000			i	850	0.92	J
Carbon Tetrachloride	68	<1.6	υ	<3	2	υ	< 0.64	υ	<0.64	' ሀ	<6.4	υ	<3.2	υ	<3.2	ιυ	<1.1	υ	<190	U	<0.64	υ	<320	υ		1	<160	U <0.64	υ
1,2-Dichloropropane	186	<2.2	U	12	1	j	94		9.4		<8.7	υ	<4.4	ΙU	<4.4	U	<1.4	U	<260	ı U	<0.87	U	<430	υ :	:	į į	<220	U <0.87	ΙU
Trichloroethene	822	300		<3.	7,	U	5.6	1 1	3.5		34	1 1	1,000	!	790		<1.2	U :	<220	U	4.7		<370	U		i	<190	U ; <0.75	ļυ
1,1,2-Trichloroethane	440	<1.8	U	<3.	7	U	< 0.73	U	<0.73	U	<7.4	, U	<3.7	i U	<3.7	U	<1.2	ιυ	<220	U	<0.73	υ	<370	U	i	!	<180	U <0.74	U
Toluene	21.200	1.9	J	5.3			3.4		1.7	-	<11	U	<5.3	U	<5.3	l U	2.0	!	<320	U	1.3		<530	i U			<270	U 3.5	T
1,2-Dibromoethane	6	<1.3	U	<2.0	6	U !	< 0.52	U	<0.52	U	<5.3	(U	<2.6	υ	<2.6	, U	< 0.87	U	<160	i U	<0.52	U	<260	U			<130	U : <0.53	U
Tetrachloroethene	1,064	1,400	i	2.8	<u> </u>	j	99	Ţ .	89		<6.0	U	34	i	33		7.1		<180	i U	150		<300	U			<150	U 1.5	
Ethylbenzene	49,000	<2.3	υ	<4.0	6	U	0.68	J	<0.92	υ	<9.2) U	<4.6	U	<4.6	U	<1.5	U	<280	U	<0.92	U	<460	U			<230	U 0.66	j J
m- & p-Xylenes	14,280	1.8	J	<4.0	6	U	2.5		1,3		<9.2	U	3.8	J	<4.6	lυ	1.1	J	<280	U	0.84	j	<460	U			<230	U 2.8	T
o-Xylene	14,280	<2.3	U	<4.0	6	υ	0.99		<0.92	U	<9.2	U	<4.6	υ	<4.6	U	<1.5	U	<280	U	<0.92	U	<460	U			<230	U 1.3	

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

TABLE 4.15

(Continued)

												•	,															Dung	8 of 10
	SOIL GAS		_					•			WEL.	L IDENTIF	ICATIO	N AND AN	NALYTI	CAL RES	ULTS (p	pbv, unless	noted)									rage	0 01 10
PARAMETERS	THRESHOLD													APOR WE															
TAKAMETERS		06-34fdc	d Qual	08-30d	Qual	11-35fd	Qual	13-31d	Qual	13-31fd	Qual	14-35d	Qual	17-35d	Qual	20-35d		24-35fd	Qual	26-35d	Qual	28-10d	Qual	29-23d	Qual	30-23d	Qual ; 3	3-35d	Qual
Nonmethane Organics as		88	:	. (3)	1	180		250	· ` [220		470		87		(3)	` ,	110					1			140		:	`
methane (ppmv)		00	1	(3)		160		2.50	:	220	į.	470		: 07	!	(3)		110		76 :		(3)	1	(3)	:	140	:	(3)	
Methane (ppmv)	12,500**	1,300	i	!	!	14,800		7,480	:	7.400	:	110		< 0.50	υ		, 1	< 0.50	υ	1.3	!		;	1		1.200	1		
Vinyl chloride	25	<1.6	i U	<1.6	U	6.5	1	(3)	1 !	36	1 ((3)	:	(3)	i :	<1.6	: U	<1.6	υ	<1.6	U :	<1.6	; U	<1.6	U	(3)		<1.6	υ
Chloroethane	75.200	<1.5	i U	<1.5	U	<3.8	U			<3.8	U		i		j	<1.5	U	<1.5	υ	<1.5	U	<1.5	U	<1.5	U		:	<1.5	υ
Acetone	31,200	<1.7	U	3.3	1	<4.2	U	i	1 1	<4.2	U			i	:	8.5	1	2.0	1	2.5		2.8	i	2.0		-	!	7.2	
trans-1,2-Dichloroethene	3.680	<1.0	ΙU	<1.0	U	<2.5	! Ü	İ	1	9.8	;			į		<1.0	· U	<1.0	. U	<1.0	U	<1.0	υ	<1.0	υ		i	<1.0	U
1,1-Dichloroethane	25.600	<1.0	· U	<0.99	: υ	<2.5	·υ	i	1	<2.5	υ			į	!	<0.99	U	< 0.99	. U	2.3	!!!	<0.99	υ	<0.99	υ	!		<0.99 :	U
cis-1,2-Dichloroethene	1,860	<1.0	: U	<1.0	U	<2.5	: U		: !	50	1 :		,			<1.0	U :	<1.0	U	46		<1.0	υ	<1.0	U	:		<1.0	U
Chloroform	340	< 0.83	i U	< 0.82	υ	<2.1	υ	ļ	1 1	<2.0	U				:	<0.82	U :	< 0.82	. U	< 0.83	U	1.7		<0.82	υ	į	! •	<0.82	υ
1,2-Dichloroethane	360	<1.0	l U	< 0.99	U	. <2.5	· U		1	<2.5	U					<0.99	: U	< 0.99	U	<1.0	U :	<0.99	U	< 0.99	U		;	<0.99	Ū
1,1,1-Trichloroethane	36.800	<0.74	U	<0.73	l U	<1.9	U	1	.1	<1.8	U			į	1	< 0.73	υ	< 0.73	. U	0.70	J	23	ſ	< 0.73	U	1		1.7	
Benzene	200	0.90	J	<1.3	U	<3.1	; U	!	1	3.5	! !					<1.3	U !	<1.3	! U	0.96	J	<1.3	U	<1.3	U	!	t	<1.3	U
Carbon Tetrachloride	68	< 0.64	U	< 0.64	U	<1.6	U	i		<1.6	U		;		1	<0.64	U	< 0.64	; U	< 0.64	U	<0.64	υ	<0.64	υ;	i		<0.64	U
1,2-Dichloropropane	186	<0.87	U	< 0.87	· U	<2.2	U		1	<2.2	U		ì		:	< 0.87	U	< 0.87	U	< 0.87	U	<0.87	U	<0.87	υ	i	۱.	<0.87	υ
Trichloroethene	822	<0.75	U	1.1	;	: 1.2	J	:	1	64	:		i	:		3.5	1	4.2	1	33	1	0.65	i J	< 0.74	U	į		16	
1,1,2-Trichloroethane	440	<0.74	i U	< 0.73	i U	<1.9	U	:	!	<1.8	U		1	i	1	<0.73	U	< 0.73	U	<0.74	ıU	< 0.73	U	<0.73	U			<0.73	υ
Toluene	21.200	3.5	1	5.2	1	4.3				4.6			-			3.3		2.5	1	6.7		3.1	i	2.5	i ;	i	ì	1.7 j	
1,2-Dibromoethane	6	< 0.53	; U	< 0.52	U	<1.3	U		1	<1.3	U		,			< 0.52	ı U	< 0.52	υ	< 0.53	U	<0.52	U	<0.52	U	1		<0.52	U
Tetrachloroethene	1,064	1.5	1	2.6	1	3.4	1			0.95	i J		1		i i	99	i	7.4		13		7.1		4.8	!	i		2.2	
Ethylbenzene	49,000	0.69	J	0.71	J	<2.3	U		i	<2.3	U				i J	0.61	J	<0.92	υ	1.3		< 0.92	U	<0.92	υΙ)		<0.92	υ
m- & p-Xylenes	14,280	2.8		3.1		1.9	J			3.3			1			2.6		2.0	1	5.4	\Box	2.5		1.1		1	-	1.3	
o-Xylene	14,280	1.2		1.3		<2.3	U			1.6	J				1	1.1	1	0.84	J	2.4		1.1		<0.92	U			<0.92	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

TRC
Custamer Focused Solution

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

TABLE 4.15

(Continued)

																							Page	9 of 10
1	SOIL GAS										WEL	L IDENTIF	ICATIO:	N AND A	NALYTICAL R	ESULTS	(ppbv, unless	noted)						
PARAMETERS	THRESHOLD												WDI-V	APOR WE	LL - PROBE D	EPTH (fee	et)							
	LIMIT (ppbv)	34-40d	Qual	35-10d	Qual	36-10d	Qual	37-10d	Qual	37-30fd	Qual	37-30d	Qual	. 40-25d	Qual 41-20	d Qual	I . 45-12d	Qual 46-07d Qual	47-08d	Qual 47-18fd	Qual 49-	18d Qua	1 51-30fd	Qual
Nonmethane Organics as		(3)	i .	(3)		(3)		52	1	100	,	(3)		. 87	(3)	:	33,000	(3)	62	180		40	400	
methane (ppmv)		(./)	: :	(.//	ž .	(5)	<u>i l</u>		<u> </u>						1	i	5.7,070	(3)	, 02	1	,		100	
Methane (ppmv)	12.500"		<u> </u>		i		i i	4.1	1	950				< 0.50	υ :	i	220,000		2.0	4,900	2	20	79	
Vinyl chloride	25	<1.6	υ	<1.6	U	<1.6	υ	(3)	i i	3.8	ļ į	3.7		(3)	. <1.0	' U	(3)	1 2.5 ·	(3)	<1.6	U : (3) i	4.6	
Chloroethane	75.200	<1.5	' U !	<1.5	υ	<1.5	U		1	<1.5	υ	<1.5	υ		<1.5	: U		4.8	1	<1.5	U	1	<3.8	U
Acetone	31.200	3.2		4.9		4.4	į į		1	<1.7	υ	<1.7	U	i	1 2.0	!	!	<1.7 U	!	13			<4.2	U
trans-1,2-Dichloroethene	3.680	<1.0	U	<1.0	U	<1.0	U		!	<1.0	U	<1.0	U		<1.0	U		<1.0 U	i .	<1.0	U :		73	
1,1-Dichloroethane	25.600	<0.99	U	<1.0	U	<1.0	U			<1.0	υ	<1.0	U	i	<0.9) : U		190		< 0.99	U '	1	16	
cis-1,2-Dichloroethene	1,860	<1.0	U	<1.0	U	<1.0	l U '		1	<1.0	! ប :	<1.0	U		<1.0	υ	•	4.2	1	<1.0	υ		170	
Chloroform	340	2.0	i	0.64		< 0.83	U		1	< 0.83	: U	< 0.83	υ		< 0.8	? " U	:	<0.82 U	:	< 0.82	U		<2.0	U
1,2-Dichloroethane	360	<0.99	U	<1.0	U	2.2				<1.0	! U !	<1.0	U	1	<0.9) : U		2.5	1	3.6	1	1	<2.5	υ
1,1,1-Trichloroethane	36,800	0.50	J	19	i	3.0			1 1	1.9	υ	1.9			1 15	t		280	1	<0.73	U :		<1.8	U
Benzene	200	<1.3	U	<1.3	υ	0.94	J		1	0.84	l j	0.79	J		; <1.3	. U	1	7.0	;	. 1.2		1	28	
Carbon Tetrachloride	68	<0.64	U	< 0.64	U	< 0.64	U			<0.64	U	< 0.64	υ		<0.6	ט וו		<0.64 U	1	<0.64	U	i	<1.6	U
1,2-Dichloropropane	186	<0.87	υ	< 0.87	U	< 0.87	U			< 0.87	įυ	< 0.87	υ		<0.8	י ! ט	!	<0.87 U	: "	< 0.87	υ	1	<2.2	U
Trichloroethene	822	4.1		66		<0.75	U		1 j	<0.75	⊥ U ,	< 0.75	υ	i	<0.7	ו ו	:	0.83	1	1 1.1	j		300	
1,1,2-Trichloroethane	440	< 0.73	U	< 0.74	U	< 0.74	U			< 0.74	υ	< 0.74	U		<0.7	U	1	<0.73 U		<0.73	υ	i	<1.8	U
Toluene	21,200	2.7		3.7		5.6	1			2.7		3.4		!	1.7		İ	11	ì	1 3.8		:	1.7	J
1,2-Dibromoethane	6	<0.53	U	< 0.53	U	< 0.53	U			<0.53	U	< 0.53	U		<0.5	: U		<0.52 U	1	<0.52	U		<1.3	υ
Tetrachloroethene	1,064	6.2		3.4	i 1	1.3			1	1.4		1.3	1	1	14		1	1.5		i 3.8 i	!	i	1,400	\Box
Ethylbenzene	49,000	<0.92	U	<0.92	U :	1.1			1	<0.92	U	0.54	, ,		<0.9	U		5.2		0.87	j	I .	<2.3	U
m- & p-Xylenes	14,280	1.4		1.4		4.6	1		1 1	1.6		2.2		t I	1.1		Ĭ.	8.9	!	2.7			1.9	J
o-Xylene	14.280	<0.92	υ	< 0.92	U	2.1	i I			0.57	J	0.85	J		<0.9	U	-	3.8		1.3			<2.3	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Well not sampled this quarter.

⁽³⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

TABLE 4.15

(Continued)

	SOIL GAS										WELL I	DENTIFICAT	ION AND	ANALYTI	CAL RES	ULTS (pp	bv, unless i	noted)								
PARAMETERS	THRESHOLD											WDI	-VAPOR \	VELL - PR	OBE DEF	TH (feet)										
	LIMIT (ppbv)	52-10d	Qual	53-200	Qual	53-300	d Qual	MP-1-5d	Qual	1	:			ŧ	!	ı		: ;	1		l				:	
Nonmethane Organics as nethane (ppmv)		230		(3)	1	140	i	100		!	i		:		: -					i					!	
Methane (ppmv)	12,500°°	31		1		900	!	2.2	i i				į			1 1		1	ŀ			!	,		- 1	
/inyl chloride	25	<7.8	: บ	⊥ 18	1	(3)	!	+ (3)	1		!		:		į	1		ı !	-		İ			1	1	
Chloroethane	75,200	<7.6	ιυ	<7.6	U	!	i		!	ļ	1	i			1	1			1	:	:			1	•	-
Acetone	31,200	14	!	<8.4	ΙU	1	i	1		1	i		Ī			1		1 1								
rans-1,2-Dichloroethene	3,680	<5.0	· U	57			!	i		!		:	1		!	1			i				1	1	i	-
,1-Dichloroethane	25,600	39	i	28	į	İ		1	!		i	,		İ		1			į	į	i		:	į.	i	:
is-1,2-Dichloroethene	1.860	<5.0	U	160	i			1	i i	1		i		i	;	i i		1	i	'	i					!
Chloroform	340	<4.1	: ບ	<4.1	ΙU	:		i		;	1		į			1		1	į		!	ļ	:			:
,2-Dichloroethane	360	<4.9	υ	<5.0	U	İ	1	;			-		İ			i			1	i	1	1			1	:
,1,1-Trichloroethane	36,800	<3.7	U	<3.7	U	i			i i	1	!	1	1	į.		!		1	1			: ''				1
Benzene	200	<6.3	U	<6.3	υ	T		i			<u> </u>		. !			1 1		1	1		1			- 1	1	
Carbon Tetrachloride	68	<3.2	U	<3.2	l U		i	Ī					l l	1	!			1	1				[]	j	t	1
,2-Dichloropropane	186	<4.3	υ	<4.4	U	1	-	1		!				İ		1		. !			- !	i	1	1	į	
richloroethene	822	<3.7	υ	1,000			-	i			j	1			!	i j			ţ	i	i	i	1		i	
,1,2-Trichloroethane	440	<3.7	υ	<3.7	U	i .	j			:													- [1
Coluene	21,200	5.1	j	<5.3	U		1							1	1						1		1 1	:	!	
,2-Dibromoethane	6	<2.6	U	<2.6	U			1	!			į.	i	i i	i				1						İ	
etrachloroethene	1,064	2.1	J	36	j		i.	Ī				<u> </u>	1			1 1				1		1	1]		1	
thylbenzene	49,000	<4.6	U	<4.6	U			1		- 1			1	_ T		i		1		i i			1	- !		
n- & p-Xylenes	14,280	<4.6	U	4.1	J			i		i						1							1			
-Xylene	14,280	<4.6	υ	<4.6	U	1								1		1 1			- !	!						

(1) The site boundary threshold level for methane is used for all comparisons.

(2) Well not sampled this quarter.

(3) Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

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TABLE 4.16

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998
WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 13

																											· uge	1 01 13
[SOIL GAS										WELI	LIDENTI	FICATIO:	N AND A	NALYTI	ICAL RES	ULTS (pp	bv, unless	noted)									
PARAMETERS	THRESHOLD				_								WDI-V	APOR WE	ELL - PR	OBE DEP	TH (feet)											
	LIMIT (ppbv)	01-35	Qual	02-35	Qual	03-35	Qual	04-23	Qual	05-29	Qual	06-34	Qual	08-35	Qual	10-35	Qual	11-35	Qual , 12-34	Qual	13-31	Qual	14-35	Qual	16-34	Qual	17-35	Qual
Nonmethane Organics as		29	!	150	1	53	,	850	: [90	1	13	:	41	į	90	1	200	11	: 1	330		370		61	- 1	63	
methane (ppmv)	<u> </u>						<u> </u>	0.00	<u> </u>		<u> </u>		i		1		<u>i i</u>		<u> </u>	<u> </u>	5.50	<u> </u>	3770				0.7	
Methane(ppmv)	12,500**	18	į	890		2,200	1	101,000		<0.50		1.9	i .	1.3		1.2	1 1	1.1	1.1	1 1	13,800		220	!	0.55	i	< 0.50	U
Vinyl chloride	25	<1.6	U	<3.9	U	<1.6	U	82	i i	<3.9	U	<1.6	υ	<1.6	υ	- 1.6	J	<7.8	U <1.6	U	56	1	14		<4.9	U	<3.9	Ū
Chloroethane	75.200	<1.5	i U i	<3.8	U	<1.5	υ:	<76	U	<3.8	. บ	<1.5	U	<1.5	υ	<1.9	U	<7.6	U <1.5	U	<15	U	5.1		<4.7	U	<3.8	U
Acetone	31,200	4.6		<4.2	υ	<1.7	U	<84	l U	13	i	2.5	i	2.8	!	<2.1	! U	<8.4	. U 4.8		<17	U	55		9.8	!	11	
trans-1,2-Dichloroethene	3,680	_<1.0	· U	<2.5	U	<1.0	U	<51	U	<2.5	! U ;	<1.0	U	<1.0	υ	<1.3	1 U i	<5.0	U <1.0	U	18		<2.5	U	<3.2	U	<2.5	Ū
1,1-Dichloroethane	25,600	<1.0	U	<2.5	U	<1.0	U :	<50	U	<2.5	U	< 0.99	. U	< 0.99	U	93		5.5	< 0.99	U	<9.9	U	190	;	2.3	J	<2.5	U
cis-1,2-Dichloroethene	1.860	<1.0	U	<2.5	U	<1.0	U	<51	. U :	<2.5	U	<1.0	U	<1.0	U	32	i	<5.0	U <1.0	υ	120		12	t	<3.2	U	<2.5	U
Chloroform	340	0.53	j j	<2.0	U	< 0.83	: U !	<41	U	<2.0	U	< 0.82	U	< 0.82	υ	<1.0	U	<4.1	U <0.82	. U '	<8.2	U	2.7		3.1		<2.0	U
1,2-Dichloroethane	360	<1.0	U	<2.5	יט	<1.0	, U :	<50	U	<2.5	U	<0.99	υ	<0.99_	U	<1.2	U	<4.9	U <0.99	U	<9.9	U	<2.5	Ü	<3.1 ⁻¹	U	<2.5	U
1,1,1-Trichloroethane	36,800	<0.74	U	<1.8	υ	<0.74	U	<37	U	<1.8	U	< 0.73	υ	<0.73	U	< 0.92	U	<3.7	U <0.73	υ	<7.3	U	<1.9	υ	6.1	!	150	
Benzene	200	<1.3	U	<3.1	U	2.8		450		<3.1	U	<1.3	U	<1.3_	. υ	1.8	1	<6.3	U <1.3	U	<13	U	12	i	<3.9	U!	<3.1	U
Carbon Tetrachloride	68	< 0.64	U	<1.6	U	< 0.64	υ	<32	U	<1.6	U	< 0.64	U	< 0.64	U	<0.80	υ	<3.2	U <0.64	U	<6.4	: U :	<1.6	U	<2.0	U	<1.6	U
1,2-Dichloropropane	186	<0.87	U	<2.2	υ.	< 0.87	U	<44	U	<2.2	U	< 0.87	·υ	<0.87	·υ	<1.1	l U ;	<4.3	U <0.87	υ	<8.7	∟_υ :	370		<2.7	Ui	<2.2	U
Trichloroethene	822	<0.75	U	<1.9	U	4.3	ii	<38	U	2.5		< 0.74	U	2.1	ļ	0.70	J	<3.7	U 1.0		90	1 1	18		300		17	
1,1,2-Trichloroethane	440	<0.74	U	<1.8	U	<0.74	ı U	<37	U	<1.8	! U	< 0.73	+ U	<0.73	υ	< 0.92	U	<3.7	U <0.73	U	<7.3	U	<1.9	U	<2.3	υ	<1.8	U
Toluene	21,200	3.3	1	<2.7	U	5.6	:	<53	U	<2.7	U	<1.1	U	1.5	1	4.6		<5.3	U 1.5	1	<11	U	3.0	1	<3.3	U	<2.7	U
1,2-Dibromoethane	6	<0.53	U	<1.3	U	<0.53	U	<26	U	<1.3	U	< 0.52	U	<0.52	l u	< 0.65	U	<2.6	U <0.52	U	<5.2	U	<1.3	U	<1.6	U	<1.3	U
Tetrachloroethene	1,064	9.3		1.0	J	110		<30	U	30		0.98		11	I	4.2	1 1	7.4	36		<5.9	U	89		5.8		21	
Ethylbenzene	49,000	<0.92	υ	<2.3	U	1.0		240		<2.3	U	< 0.92	U .	<0.92	U	0.93]	<4.6	U <0.92	U	<9.2	U	13		<2.9	U	<2.3	υ
m- & p-Xylenes	14,280	1.5		1.8	J	4.2		51		1.5	J	<0.92	Ü	0.91	J	4.1		<4.6	U <0.92	U	<9.2	U	23	1	<2.9	U	<2.3	U
o-Xylene	14,280	<0.92	U	<2.3	U	1.0	ī	<46	U	<2.3	U	<0.92	U	<0.92	U	1.6		<4.6	U <0.92	U	<9.2	U	59	Ţ	<2.9	U	<2.3	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate fd = field duplicate shown).

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 2 of 13

	SOIL GAS										WELI	. IDENTIF	ICATIO	N AND AN	ALYTI	CAL RES	ULTS (pp	bv, unless	noted)										2011.
PARAMETERS	THRESHOLD												WDI-VA	APOR WE	LL - PR	OBE DEP	TH (feet)												
	LIMIT (ppbv)	18-36	Qual	20-35	Qual	21-36	Qual	22-35	Qual	23-36	Qual	24-35	Qual	25-35	Qual	26-35	Qual	27-09	Qual	27-19	Qual	27-35	Qual	28-10	Qual	28-25	Qual	29-10	Qual
Nonmethane Organics as		9,000		 21		110	1	79	1 1	120		94		7,500		7.2		93		17		94	i	42		61		28	
methane (ppmv)			1		i		1		i :		1 1						1		; '		1		j						
Methane (ppmv)	12,500**	6.8		2.2		2.6	1 1	0.72		330	1 1	2.6	ļ.,	155,000		0.80	1	23		< 0.50	lυ	<0.50	υ	0.85		<0.50	υ	0.99	
Vinyl chloride	25	<200	U	<3.9	U	<7.8	U	<20	! U	<20	U	<1.6	υ	<200	U	<3.9	U	<1.6	! U	<1.6	: U	<1.6	U	<1.6	U	<1.6	U.	<1.6	U
Chloroethane	75,200	<190	υ	<3.8	U	<7.6	U	<19	i U	<19	U	<1.5	U	<190	U	<3.8	U	<1.5	ີ ປ	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U
Acetone	31,200	<210	U	5.5		370		<u><21</u>	υ	<21	ΙυΙ	11		280		26		<1.7	U	9.7	l l	13	<u> </u>	5.0		7.7		5.4	
trans-1,2-Dichloroethene	3,680	<130	U	<2.5	lυ!	<5.0	U	<13	i U	<13	U	<1.0	U	<130	U	<2.5	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U
1,1-Dichloroethane	25,600	<120	υ	<2.5	i U	<4.9	U	<12	U	11	l J	< 0.99	U	<120	U	2.5		<1.00	i U :	<1.00	U	<1.00	U	<0.99	U	<0.99	U	<0.99	υ
cis-1,2-Dichloroethene	1.860	<130	υ	<2.5	U	< 5.0	; U	<13	U	27	i i	<1.0	· U	<130	U	210	1	<1.0	: U	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<1.0	U
Chloroform	340	<100	U '	<2.0	υ	<4.1	υ	<10	υ	<10	U	0.97	U	<100	U	<2.0	U	<0.83	U	< 0.83	U_i	<0.83	U	2.6		1.4 :		< 0.82	U
1,2-Dichloroethane	360	<120	U	<2.5	U	<4.9	l U I	<12	<u> </u>	<12	‡ U	<0.99	1 U 1	<120	U	<2.5	U	<1.00	' U	<1.00	U	<1.00	U	<0.99	U	<0.99	υi	<0.99	υ
1,1,1-Trichloroethane	36,800	<93	U	<1.8	U	<3.7	U	<9.2	· U 1	<9.2	U	< 0.73	U	<92	U	1.6	J	<0.74	U	1.9	1	<0.74	L U	4.0		0.91	į	9.3	
Benzene	200	740		<3.1	U !	<6.3	: U :	<16	U	<16	U	<1.3	↓ U l	<160	U	<3.1	U	<1.3	; U	1.6		1.8		<1.3	υ	<1.3	U	<1.3	U
Carbon Tetrachloride	68	<80	U	<1.6	i U	<3.2	: U !	<8.0	U	<8.0	l U i	<0.64	U	<80	U	<1.6	U	<0.64	Ui	< 0.64	Ui	<0.64	U	<0.64	υ :	< 0.64	U	< 0.64	U
1,2-Dichloropropane	186	<110	U	<2.2	U	<4.3	U	<11	U	<11	υ	<0.87	<u> </u>	<110	U	<2.2	U !	<0.87	! U !	< 0.87	U ,	<0.87	i U I	<0.87	_ U	< 0.87	U	<0.87	U
Trichloroethene	822	<94	υ	3.7		340	1	2,000	i	590	<u>i</u> i	31	i	<93	U	2.6		< 0.75	i U i	< 0.75	υ	< 0.75	U	0.57	J	<0.74	U	<0.74	U
1,1,2-Trichloroethane	440	<93	U	<1.8	U	<3.7	U	<9.2	U	<9.2	U	<0.73	U	<92	U	<1.8	U	< 0.74	U	< 0.74	UI	< 0.74	U	<0.73	U	<0.73	υ	<0.73	υ
Toluene	21,200	<130	U	<2.7	υ	<5.3	U	<13	U	<13	<u> </u>	<1.1	U	94	J	<2.7	U	5.8	1	3.0	- 1	13		2.1		0.92	J	2.1	
1,2-Dibromoethane	6	<66	U	<1.3	U	<2.6	U	<6.5	U	<6.5	U	<0.52	U	<65	บ	<1.3	<u> U </u>	< 0.53	<u> U </u>	<0.53	υ	<0.53	U	<0.52	U	< 0.52	U	<0.52	U
Tetrachloroethene	1,064	<75	υ	130	1 1	16	<u> </u>	110		34		8.2		<74	U	27		1.9		2.2		2.3		10	<u></u>	24	1.	2.5	
Ethylbenzene	49,000	<120	U	<2.3	Jυ	<4.6	U	<12	U	<12	U	<0.92	U	330		<2.3	U	1.9	i i	< 0.92	U	8.7		<0.92	U	<0.92	υ	<0.92	U
m- & p-Xylenes	14,280	<120	U	<2.3	U	<4.6	U	2</th <th>U</th> <th><12</th> <th>U</th> <th><0.92</th> <th>U</th> <th>91</th> <th>J</th> <th><2.3</th> <th>U</th> <th>4.4</th> <th> </th> <th>1.4</th> <th></th> <th>49</th> <th>!</th> <th>2.1</th> <th></th> <th><0.92</th> <th>U</th> <th>1.1</th> <th></th>	U	<12	U	<0.92	U	91	J	<2.3	U	4.4		1.4		49	!	2.1		<0.92	U	1.1	
o-Xylene	14,280	<120	υ	<2.3	U	<4.6	U	<12	U	<12	U	<0.92	U	<120	U	<2.3	U	1.7		<0.92	U	21	!	1.1		<0.92	U	< 0.92	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate fd = field duplicate boundary threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limits shown).

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 3 of 13 WELL IDENTIFICATION AND ANALYTICAL RESULTS (ppbv, unless noted) SOIL GAS WDI-VAPOR WELL - PROBE DEPTH (feet) **PARAMETERS** THRESHOLD LIMIT (ppbv) 29-23 Qual 30-35 Qual 32-35 Qual 33-10 Qual 33-35 Qual 34-10 Qual 34-23 Qual 29-35 Qual 30-07 Qual 30-23 Qual Qual 31-10 Qual | 31-30 Qual 32-08 Qual 32-18 Nonmethane Organics as 47 12 32 36 3.5 <1.0 5.1 5.4 62 89 44 85 methane (ppmv) 12,500" 290 < 0.50 0.55 0.93 Methane (ppmv) < 0.50 1.1 2.0 < 0.50 1.4 14 1.5 0.93 13 14 11 Vinyl chloride 25 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 U <1.6 <1.6 <7.8 <1.6 <1.6 Chloroethane 75.200 <1.5 υ <1.5 <1.5 U : <1.5 U <1.5 U <1.5 U <1.5 U <1.5 U <1.5 U <1.5 <1.5 U † <7.6 U <1.5 <1.5 U 31,200 8.9 <1.7 9.2 <1.7 9.8 <1.7 <1.7 Acetone 2.8 3.6 <1.7 U U 12 16 7.6 U U rans-1,2-Dichloroethene 3.680 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <5.0 <1.0 <1.0 U 1,1-Dichloroethane 25.600 < 0.99 < 0.99 2.0 <1.00 11 <1.00 11 <0.99 <0.99 < 0.99 < 0.99 < 0.99 <4.9 < 0.99 Ü U i U 1.1 U i U U <0.99 | U Ð < 0.99 U cis-1,2-Dichloroethene 1.860 <1.0 <1.0 <1.0 <1.0 0.81 <1.0 U <1.0 <1.0 <1.0 <1.0 <1.0 υ < 5.0 <1.0 <1.0 Chloroform 340 < 0.82 3.2 < 0.83 0.59 0.70 < 0.82 U 3.2 < 0.82 < 0.82 U 1.00 0.65 j j 5.4 < 0.82 1.4 ,2-Dichloroethane 360 <0.99 < 0.99 <1.00 <1.00 <1.00 U < 0.99 < 0.99 < 0.99 < 0.99 1 11 < 0.99 <0.99 U <4.9 <0.99 U | <0.99 | U 1,1,1-Trichloroethane 36,800 0.51 50 < 0.74 < 0.74 < 0.73 < 0.73 0.72 3.0 7.6 43 2.9 0.98 200 U <1.3 <1.3 Benzene < 1.3 <1.3 <1.3 <13 < 1.3 U <1.3 11 U <1.3 <1.3 <1.3 <6.3 U 0.79 <1.3 Carbon Tetrachloride 68 < 0.64 < 0.64 < 0.64 < 0.64 < 0.64 U < 0.64 U < 0.64 U < 0.64 < 0.64 U < 0.64 < 0.64 <3.2 U < 0.64 < 0.64 ,2-Dichloropropane 186 < 0.87 U < 0.87 <0.87 U < 0.87 < 0.87 U < 0.87 U < 0.87 U < 0.87 U < 0.87 U < 0.87 < 0.87 U : <4.3 <0.87 U < 0.87 Trichloroethene 822 U 0.91 < 0.74 6.3 250 < 0.74 < 0.75 6.6 17 < 0.74 U < 0.74 U 1.2 < 0.74 < 0.74 < 0.74 1,1,2-Trichloroethane 440 < 0.73 < 0.74 <0.74 < 0.74 < 0.73 < 0.73 < 0.73 < 0.73 < 0.73 < 0.73 <3.7 <0.73 < 0.73 Toluene 21.200 0.75 0.65 1.7 0.97 1.1 <1.1 U <1.1 u <1.1 U <1.1 <1.1 U <1.1 U i <5.3 U i 1.5 0.88 U 2-Dibromoethane < 0.52 < 0.52 < 0.53 < 0.53 < 0.53 U < 0.52 υ < 0.52 < 0.52 < 0.52 U < 0.52 < 0.52 U <2.6 υ < 0.52 <0.52 U 6 Tetrachloroethene 1,064 7.3 19 İ 2.7 220 250 15 41 0.45 j i 0.46 J 1.7 1.3 13 1.8 9.2 Ethylbenzene 49.000 <0.92 <0.92 <0.92 <0.92 <0.92 < 0.92 < 0.92 <0.92 < 0.92 < 0.92 < 0.92 <4.6 | U <0.92 < 0.92 U U - 11 11 m- & p-Xylenes 14,280 U < 0.92 U 0.84 0.62 0.70 < 0.92 < 0.92 < 0.92 < 0.92 υ < 0.92 υ U 0.60 <4.6 <0.92 | U | <0.92 | U | <0.92 | U | <0.92 14.280 o-Xylene < 0.92 U <0.92 U U <0.92 U < 0.92 < 0.92 U <0.92 U <0.92 U <4.6 0.59 0.94 U U



⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 4 of 13

	SOIL GAS										WEL.	LIDENTIF	ICATION	N AND AN	NALYTI	CAL RESU	JLTS (pp	bv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-VA	APOR WE	LL - PR	OBE DEPI	TH (feet)												
	LIMIT (ppbv)	34-40	Qual	35-10	Qual	35-38	Qual	36-10	Qual	36-30	Qual	37-10	Qual	37-30	Qual	38-10	Qual	38-34	Qual	39-07	Qual	39-30	Qual	40-10	Qual	40-25	Qual	41-07	Qual
Nonmethane Organics as methane (ppmv)		91		50		86	i	34		81		3.6		<1.0	υ	13		1,300		33		72		140		85		22	
Methane (ppmv)	12,500"	1.2	1	0.53		7.8		1.7		< 0.50	υ	2.1	1 1	< 0.50	Ü	2.8		82	İ	2.2		0.67		5,840		<0.50	U !	0.59	
Vinyl chloride	25	<1.6	U	<3.9	; U	<16	U	<1.6	U	<3.9	U	<1.6	ı U i	<1.6	U	<1.6	U	<7.9	U	<1.6	· U	<1.6	U	<1.6	U	<2.6	U	<1.6	U
Chloroethane	75,200	<1.5	_ U	<3.8	υ	<15	: U	<1.5	U	<3.8	ı U	<1.5	υ	<1.5	U	<1.5	U	<7.6	lυ	<1.5	U	<1.5	U	<1.5	υ.	<2.5	U	<1.5	U
Acetone	31,200	5.7		14	ŀ	<17	U	6.1	i i	37	!i	14	1	4.1	i	2.8		<8.4	U	<1.7	U	<1.7	U	<1.7	U	13	i	34	
trans-1,2-Dichloroethene	3,680	<1.0	[_U	<2.5	U	<10	U	<1.0	U	<2.5	U	<1.0	U	<1.0	U	<1.0	U	<5.1	; U_	<1.0	U	<1.0	U	<1.0	U	<1.7	U	<1.0	U
1,1-Dichloroethane	25.600	<0.99	U	<2.5	υ	<9.9	U	< 0.99	U	<2.5	U	<0.99	U	<0.99	U	0.7	J	<5.0	U	13	1	<0.99	U	1.5	Ī	<1.6	υ	<0.99	U
cis-1,2-Dichloroethene	1.860	<1.0	_ U	<2.5	<u>'</u> U -	<10	U	<1.0	U	<2.5	U	<1.0	¹ U :	<1.0	U	<1.0	υ	<5.1	U	<1.0	<u> U</u> ;	<1.0	U :	1.7		<1.7	U .	<1.0	υ
Chloroform	340	1.7	,	<2.0	; U	23	1	< 0.82	່ ບ !	1.7	,]	<0.82	υ	< 0.82	` บ เ	< 0.83	υi	<4.1	υ	< 0.82	1 U '	<0.82	υ	< 0.82	U :	<1.4	υ	< 0.82	υ
1,2-Dichloroethane	360	< 0.99	U	<2.5	U :	<9.9	υ	< 0.99	U	<2.5	U	<0.99	U	<0.99	U ;	<1.00	U	<5.0	U_	< 0.99	, U	<0.99	U	<0.99	U	<1.6	U	<0.99	U
1,1,1-Trichloroethane	36.800	< 0.73	υ	12	i l	<7.3	U	0.54	J	<1.8	U	51		< 0.73	U	35	İ	<3.7	U	84		7.8	1	15		1.4		17	
Benzene	200	<1.3	U	<3.1	l U i	<13	. U !	1.1	. J :	<3.1	U	12		<1.3	U	<1.3	υ	<6.3	U	<1.3	: U	<1.3	U	27		<2.1	U	<1.3	U
Carbon Tetrachloride	68	<0.64	U	<1.6	U	<6.4	U	< 0.64	υ	<1.6	U	<0.64	U	< 0.64	U	< 0.64	U	<3.2	U	< 0.64	U	<0.64	U	<0.64	U	<1.1	U	<0.64	U
1.2-Dichloropropane	186	< 0.87	<u> </u>	<2.2	U	<8.7	U	< 0.87	! U ;	<2.2	U	<0.87	<u> </u>	< 0.87	υ	<0.87	U	3.7]]	< 0.87	U	<0.87	U	<0.87	<u>U</u> !	<1.4	υ	<0.87	U
Trichloroethene	822	3.2		66	!	1,700		< 0.74	U :	<1.9	U	<0.74	υ	< 0.74	U	< 0.75	U	<3.8	U	<0.74	υ	<0.74	U	<0.74	U	2.2	i	<0.74	U
1,1,2-Trichloroethane	440	< 0.73	U	<1.8	υ	<7.3	υ	< 0.73	υ	<1.8	U	<0.73	<u> U 1</u>	< 0.73	υ	< 0.74	U	<3.7	U	< 0.73	U	< 0.73	U !	<0.73	U	<1.2	υ	< 0.73	U
Toluene	21,200	0.77	J !	<2.7	U	<11	U	2.3] [11	_ i	43	1	<1.1	υ	1.4	<u> </u>	<5.3	U	<1.j	U	<1.1	υı	1.3	!	1.4	J	<1.1	υ
1,2-Dibromoethane	6	<0.52	U	<1.3	U	<5.2	. U !	< 0.52	U ;	<1.3	U	<0.52	, U i	< 0.52	U	< 0.53	U	<2.6	U	< 0.52	U	<0.52	U	<0.52	U	<0.87	υ	<0.52	U
Tetrachloroethene	1,064	4.6		4.8		34		1.2		3.1		0.52	1	1.4	ii	3.3		18		5.2		11		4.0		93		62	
Ethylbenzene	49,000	<0.92	U	<2.3	U	<9.2	U	< 0.92	U	3.6		3.7	[]	<0.92	U	< 0.92	υ	<4.6	U	< 0.92	l U	<0.92	U	<0.92	U	<1.5	U (<0.92	υ
m- & p-Xylenes	14,280	0.69	J	<2.3	υ	<9.2	U	1.7		17		31	1	<0.92	υ	1.3		<4.6	U	< 0.92	U	<0.92	U !	1.9		<1.5	U	<0.92	U
o-Xylene	14,280	< 0.92	U	<2.3	U	<9.2	U	0.63	J	7.1		9.6		<0.92	U	<0.92	U	<4.6	U	< 0.92	U	<0.92	υİ	<0.92	υ	<1.5	U	<0.92	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 5 of 13

	SOIL GAS										WEL	L IDENTI	ICATION	AND AN	NALYTIC	CAL RESU	ULTS (pp	bv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-VA	POR WE	LL - PRO	OBE DEPT	ΓH (feet)												
<u> </u>	LIMIT (ppbv)	41-20	Qual	42-10	Qual	42-30	Qual	43-09	Qual	43-19	Qual	43-32	Qual	44-07	Qual	44-16	Qual	44-30	Qual	45-12	Qual	45-22	Qual	45-30	Qual	46-07	Qual	46-15 : (Qual
Nonmethane Organics as methane (ppmv)		12		41		76		43		460		450	1	110	i I	55	:	120	!	64.000		13,000		910		150		35	
Methane (ppmv)	12.500**	< 0.50	U	1.3	:	< 0.50	U	40		18,100	i i	14,100	<u> </u>	1.200	!	3.1		2.8		260,000		101,000	i i	11,200	i	46,500	į	<0.50	υ
Vinyl chloride	25	<1.6	U	<1.6	υ	<1.6	U	<1.6	υ	430	_ ii	530	1 1	<3.9	υ	<3.9	U	<20	υ	140,000	:	38,000	! !	99	1	4.8		<1.6	U
Chloroethane	75,200	<1.5	U	<1.5	U	<1.5	υ	<1.5	υ	<15	U	<15	: U !	<3.8	U	<3.8	U	<19	U	<3.800	υ	<760	υ	<38	UÌ	1.7	- 1	<1.5 '	U
Acetone	31.200	3.0		7.1		5.8	!	2.7		<17	υ	<17	U	42		13		<21	υ	<4,200	U	<840	U	<42	U	<1.7	U :	14	
trans-1,2-Dichloroethene	3.680	<1.0	U	<1.0	U	<1.0	U	<1.0	υ	8.6	, j	8.2	J	<2.5	U	<2.5	<u>U</u> :	<13	U	9,700	i	2,800		<25	U !	<1.0	1	<1.0	U
1,1-Dichloroethane	25.600	<0.99	U	< 0.99	į U	<0.99	U	< 0.99	UI	<10	į U i	<9.9	į U ·	<2.5	U	2.7	i i	79		<2,500	U	<490	U	<25	υ	93		3.2	
cis-1,2-Dichloroethene	1.860	<1.0	U	<1.0	U	<1.0	U	<1.0	U	<10	υ ;	340		<2.5	υ	<2.5	U	<13	<u>i U</u>	7,700		1,300	1 .	<25	U	13	:	<1.0	U
Chloroform	340	< 0.82	U I	5.0	1	< 0.82	U	< 0.82	Ui	<8.2	i U	<8.2	U	<2.0	U	<2.0	U	<10	U	<2.000	υ	<410	; U ;	<20	U	< 0.83	U :	1.0	
1,2-Dichloroethane	360	< 0.99	U	< 0.99	U	< 0.99	υ	<0.99	U	<9.9	U	<9.9	U :	<2.5	U	<2.5	U	<12	. U	<2,500	U	<490	U	<25	U	<1.00	U	<1.00	U
1,1,1-Trichloroethane	36,800	16		< 0.73	U	< 0.73	U	0.87	L U	<7.3	i U i	<7.3	υ	7.2		78	<u> </u>	690		<1,800	U	<370	U	<18	U	23		78	
Benzene	200	<1.3	U	1.7	. !	4.3	1	<1.3	บ	11	J	23	1 1	<3.1	U	<3.1	υ	<16	U	32,000		1,800		32		11	:	<1.3	U
Carbon Tetrachloride	68	< 0.64	U i	< 0.64	U	< 0.64	υ	<0.64	. U	<6.4	U	<6.4	U +	<1.6	Ui	<1.6	U	<8.0	υ	<1.600	U	<320	U	<16	U	<0.64	U	<0.64	U
1,2-Dichloropropane	186	<0.87	U	< 0.87	U	< 0.87	U	<0.87	U	<8.7	<u> </u>	<8.7	U	<2.2	U	<2.2	U	< 1 	U	<2,200	U	<430	U	<22	U	<0.87	υ	<0.87	U
Trichloroethene	822	< 0.74	: U	< 0.74	υ	0.93		6.1		<7.4	U	<7.4	: U !	<1.9	U	_<1.9	U	<9.3	υ	<1.900	U	<370	U	<19	U	< 0.75	บ	22 j	
1,1,2-Trichloroethane	440	<0.73	U	<0.73	υ	< 0.73	υ	< 0.73	U	<7.3	U	<7.3	U	<1.8	U	<1.8	U	<9.2	υ	<1,800	U	<370	U	<18	U	<0.74	U	<0.74	U
Toluene	21,200	<1.1	U I	3.8		25		<1.1	U	8.6	J !	<11	U	3.7		3.8	1	<13	·υ	39,000		600		<27	UΙ	15		2.0	
1,2-Dibromoethane	6	< 0.52	υ	<0.52	U	< 0.52	U	<0.52	υ	<5.2	U	<5.2	U	<1.3	U	<1.3	U	<6.5	U	<1,300	U	<260	U	<13	U	< 0.53	U	<0.53	υ
Tetrachloroethene	1,064	27		8.5	Ĭ.	13		18		7.0		<5.9	U	1.7		1.7	1	<7.4	Lυ	<1,500	U	<300	Ui	24	1	< 0.60	υ	210	
Ethylbenzene	49,000	<0.92	υ	< 0.92	U	2.5		< 0.92	υ	<9.2	υ	<9.2	υ	<2.3	υ	<2.3	υ	<12	υ	6.000		<460	υ	<23	υ	12	1	<0.92	υ
m- & p-Xylenes	14,280	<0.92	U	2.5		11		<0.92	U	7.7	J	6.1	J	2.1]]	<2.3	U	<12	U	23,000		570		21]	23		1.4	
o-Xylene	14,280	<0.92	U	0.70	J	3.2		<0.92	U	<9.2	U	<9.2	l U j	<2.3	U	<2.3	υ	<12	υ	6,800		360	J	<23	U	8.4		<0.92	υ

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

TABLE 4.16

(Continued)

PARAMETERS SOIL GAS THRESHOLD LIMIT (pphv) 46-27 Qual 47-08 Qual 47-18 Qual 47-30 Qual 48-08 Qual 48-08 Qual 48-17 Qual 48-35 Qual 49-10 Qual 49-10 Qual 49-30 Qual 50-08 Qual 50-18 Qual 50-35 Qual 48-40 Qual	1 51-18 Qua 19,000 328,000 <790 U
PARAMETERS THRESHOLD LIMIT (ppbv) 46-27 Qual 47-08 Qual 47-18 Qual 47-30 Qual 48-08 Qual 48-18 Qual 48-17 Qual 48-18 Qual 49-10 Qual 49-18 Qual 49-30 Qual 50-08 Qual 50-18 Qual 50-35 Qual 49-10 Qual 49-10 Qual 49-10 Qual 49-10 Qual 49-10 Qual 49-10 Qual 49-30 Qual 50-08 Qual 50-18 Qual 50-35 Qual 49-10 Qu	19,000 328,000
LIMIT (ppbv) 46-27 Qual 47-08 Qual 47-18 Qual 47-18 Qual 48-08 Qual 48-08 Qual 48-17 Qual 48-35 Qual 49-10 Qual 49-18 Qual 49-30 Qual 50-08 Qual 50-18 Qual 50-35 Qual 50-08 Qual 50-18 Qual 50-35 Qual 50-08 Qual 50-18 Qual 50-35 Qual 49-10 Qual 49-1	19,000 328,000
Methane (ppmv) 12,500" <0,50 U 1.6 4.0 0.58 155,000 517,000 16,600 15 1.4 1.0 1.2 <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0,50 U <0	328,000
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Acetone 31,200 6.4 3.5 8.6 6.1 420 U <2.100 U <21 U 9.8 7.9 35 4.4 27 3.4 trans-1,2-Dichloroethene 3.680 <1.0 U <1.0 U <1.0 U <2.5 U <2.5 U <2.5 U <2.5 U <1.0 U <1.300 U <1.3 U <2.5 U <2.5 U <2.5 U <2.5 U <2.5 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U	1 1770
trans-1,2-Dichloroethene 3,680 <1.0	<760 U
1,1-Dichloroethane 25,600 <1,00 U <0,99 U <2,5 U <2,5 U <2,5 U <1,200 U <1,200 U <1,200 U <2,5 U <2,5 U <2,5 U <2,5 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0 U <1,0	<840 U
cis-1,2-Dichloroethene 1,860 <1,0	<510 U
Chloroform 340 1.3 <0.82	<500 U
1,2-Dichloroethane 360 <1.00 U <0.99 U <2.5 U <2.5 U <2.5 U <1.200 U <1.2 U <2.5 U <2.5 U <2.5 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U <1.0 U	<510 U
1,1,1-Trichloroethane 36,800 7.4 <0.73 U <1.8 U <1.8 U <1.8 U <920 U <9.2 U 7.2 <1.9 U <1.9 U 8.9 3.0 1.9 U September Sept	<410 U
Benzene 200 <1.3	, <500 U
Carbon Tetrachloride 68 <0.64 U <0.64 U <1.6 U <1.6 U <1.6 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U <0.64 U	<370 U
	6,500
	<320 U
1.2-Dichloropropane 186 <0.87 U <0.87 U <2.2 U <2.2 U <2.2 U <1.100 U <1.100 U <1.1 U <2.2 U <2.2 U <2.2 U <0.87 U <0.87 U <0.87 U <0.87 U	<440 U
Trichloroethene 822 29 <0.74 U <1.9 U 1.2 J <190 U <930 U 15 38 52 31 <0.75 U <0.75 U 6.3	<380 U
1,1,2-Trichloroethane 440 <0.74 U <0.73 U <1.8 U <1.8 U <180 U <920 U <9.2 U <1.9 U <1.9 U <1.9 U <0.74 U <0.74 U <0.74 U <0.74 U <0.74 U	<370 U
Toluene 21.200 1.4 <1.1 U <2.7 U <2.7 U <270 U <1.300 U <13 U 2.2 J 2.4 J 2.0 J 1.7 1.5 0.85 J	<530 U
1,2-Dibromoethane 6 <0.53 U <0.52 U <1.3 U <1.3 U <1.3 U <650 U <6.5 U <1.3 U <1.3 U <1.3 U <0.53 U <0.53 U <0.53 U <0.53 U	<260 U
Tetrachloroethene 1.064 230 2.0 75 13 <150 U <740 U 52 210 540 530 2.3 2.8 10	<300 U
Ethylbenzene 49,000 <0.92 U <0.92 U <2.3 U <2.3 U <2.3 U <5.500 <12 U <2.3 U <2.3 U <2.3 U <2.3 U <0.92 U 0.65 J <0.92 U	1,500
m- & p-Xylenes 14,280 0.70 J <0.92 U <2.3 U <2.3 U <230 U 3,900 <12 U 2.4 <2.3 U II 1.0 1.3 <0.92 U	950
o-Xylene 14.280 <0.92 U <0.92 U <2.3 U <2.3 U <2.3 U <1,200 U <1.2 U <2.3 U <2.3 U 1.6 J <0.92 U <0.92 U <0.92 U <0.92 U	850

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

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ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 7 of 13

																								_				rage	/ of 13
	SOIL GAS			_							WELI	. IDENTII	FICATIO	N AND A	NALYT	ICAL RES	ULTS (p	obv, unless	noted)										
PARAMETERS	THRESHOLD												WDI-V	APOR WE	LL - PR	OBE DEP	TH (feet)												
	LIMIT (ppbv)	51-30	Qual	52-10	Qual	52-19	Qual	52-30	Qual	53-10	Qual	53-20	Qual	53-30	Qual	54-12	Qual	54-20	Qual	54-30	Qual	55-05	Qual	55-18	Qual	55-29	Qual :	56-08	Qual
Nonmethane Organics as		1.000		180	1	32	T 1	24		2,400		42	!	110	1	9.5	1	48	1	16		2,100	1	770		400		37	
methane (ppmv)		1,000	<u> </u>	100	ļ 	,			1 1	2,400				- 110	1	7.5				10		2,100	! :		<u>; i</u>	400	<u>i</u>	37	
Methane (ppmv)	12,500**	13,300		140	1_	0.70	1	< 0.50	U	7,700		18		31		62	Ī Ī	8,350		4,900	!	119,000))	9,930		8,760	:	20	
Vinyl chloride	25	16	j j	<3.9	U	<1.6	U	<1.6	U I	<78	υ	<3.9	υ	<16	U	<1.6	U	<1.6	i U	<1.6	U	<78	υ	87		82		18	
Chloroethane	75.200	<19	U	6.2	-	<1.5	U	<1.5	i U i	<76	U	<3.8	U	<15	·υ	<1.5	U	<1.5	<u>υ</u>	<1.5	U	<76	U	<19	U	<15	U	<1.5	υ
Acetone	31,200	<21	U	15		100	1	6.3		<84	U	<4.2	['] U	<17	U	<1.7	TU	<1.7	U	38		<84	υ	<21	: U	<17	U	<1.7	U
trans-1,2-Dichloroethene	3.680	110	i i	<2.5	υ	<1.0	U	<1.0	U	<50	υ	<2.5	U	<10	υ	<1.0	U	<1.0	U	<1.0	i U i	<50	U	63	1	61		15 !	
1,1-Dichloroethane	25,600	12	J	69		74	11	85	i!	<49	U	3.6		12	1	< 0.99	υ	<0.99	U	<0.99	U	<49	U	9.6	; J :	7.6	J	10	
cis-1,2-Dichloroethene	1.860	180		<2.5	υ	5.4		4.1		71	:	9.5	:	7.4	. J	<1.0	Ū	8.8	!	2.7		<50	U	230	1 :	250	1	320	
Chloroform	340	<10	U	<2.1	U	3.4		9.0		<41	U	<2.0	U	<8.2	υ	< 0.82	, U :	<0.82	υ	< 0.82	: υ	<41	U	<10	U :	<8.2	U !	<0.83	Ü
1,2-Dichloroethane	360	<12	υ	<2.5	U	<1.00	U	<1.00	U	<49	υ	<2.5	U_	<9.9	U	<0.99	U	<0.99	U	<0.99	U	<49	υ,	<12	U	<9.9	U	<1.00	υ
1,1,1-Trichloroethane	36.800	<9.3	U	<1.9	U	1.9	T	2.4	1	<37	U	<1.8	υ	<7.3	υ	<0.73) U	<0.73	υ	< 0.73	U	<37	U	<9.2	U	<7.3	Ū i	<0.74	U
Benzene	200	36		3.1	J	1.1	i j	<1.3	, U :	<63	U	<3.1	i U	<13	U	<1.3	i U	2.2	[.	4.4		<63	υ,	20		8.7)	26	
Carbon Tetrachloride	68	<8.0	U	<1.6	F U	<0.64	υ,	< 0.64	, υ :	<32	υ	<1.6	U	<6.4	: U	< 0.64	! U !	<0.64	U	< 0.64	U	<32	U :	<8.0	U,	<6.4	U i	<0.64	U
1,2-Dichloropropane	186	<11	U	27	Ţ	110		510		<43	U	<2.2	U	<8.7	U	< 0.87	U	< 0.87	U	< 0.87	U	<43	U	!</th <th>U</th> <th><8.7</th> <th>U</th> <th>< 0.87</th> <th>U</th>	U	<8.7	U	< 0.87	U
Trichloroethene	822	400		1.8	3	16		23	1	<37	υ	180	1	840	1.	0.61	J	4.9	1	1.3	!	<37	U	740		650		140	
1,1,2-Trichloroethane	440	<9.3	U	<1.9	U	<0.74	υ	<0.74	TU :	<37	U	<1.8	U	<7.3	υ	<0.73	_ U	<0.73	U	< 0.73	U	<37	U	<9.2	U ;	<7.3	U	<0.74	U
Toluene	21,200	<13	U	7.3		0.93	i J +	< <u>l.l</u>	U	<53	U	<2.7	U	<11	U	1.5	1	1.7	i	6.3		<53	U	<13	U	<11	U !	1.7	
1,2-Dibromoethane	6	<6.6	U	<1.3	υ	< 0.53	υ	<0.53	U	<26	U	<1.3	j U	<5.2	U	<0.52	U	< 0.52	U	<0.52	U	<26	U	<6.5	U	<5.2	υ	< 0.53	U
Tetrachloroethene	1,064	420		9.8		180		190] [<30	U	9.6	_ i	55	f	1.6		<0.59	U	<0.59	U	<30	U	8.4		9.9		52	
Ethylbenzene	49,000	<12	U	<2.3	U	<0.92	U	< 0.92	U_	<46	υ	<2.3	: U	<9.2	ΙU	< 0.92	i U	< 0.92	U	< 0.92	U	<46	U	<12	U	<9.2	U	0.84	J
m- & p-Xylenes	14,280	<12	U	4.0		<0.92	U	<0.92	U	<46	U	<2.3	U	<9.2	U	0.69	J	0.64	J	1.2		<46	U	<12	U	<9.2	U	3.2	
o-Xylene	14,280	<12	υ	<2.3	υ	< 0.92	U	<0.92	υ	<46	υ	<2.3	υ	<9.2	iυ	<0.92	U	<0.92	υ	< 0.92	U	<46	U	<12	υ	<9.2	Ų	0.86	J

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

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J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limits shown).

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 8 of 13

	SOIL GAS	_		***************************************							WELI	JDENTIF	FICATIO	N AND A	VALYTI	CAL RES	ULTS (pr	pbv, unless	noted)										. 0 01 13
PARAMETERS	THRESHOLD													APOR WE						-									
	LIMIT (ppbv)	56-17	Qual	56-28	Qual	57-07	Qual	57-18	Qual	57-26	Qual	58-08	Qual	58-18	Qual	58-29	Qual	59-07	Qual	59-17	Qual	59-27	Qual	60-10	Qual	60-18	Qual	60-28	Qual
Nonmethane Organics as		37		40		2.1		33	1.	35	1	26		110		100	: :	7.3	1	22	:	29]	4.9	1	23		24	
methane (ppmv)			<u> </u>						1	22	1				<u> </u>		<u> </u>												
Methane (ppmv)	12,50011	3.1		1.8		39		11	<u> </u>	13	1 1	1.3		<0.50	U	0.53	1	5.8	1	1.0	[1.7		1.9	1	0.54	1	< 0.50	U
Vinyl chloride	25	<1.6	U	<1.6	υ	<1.6	U	<1.6	U	<1.6	υ	<1.6	U	<3.9	U	<3.9	; U	<1.6	υ	<1.6	U	<1.6	U	<1.6	U	<1.6	U	<1.6	υ_
Chloroethane	75,200	<1.5	υ	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	: U	<3.8	U	<3.8	U	<1.5	U	<1.5	υ	<1.5	U	<1.5	U	<1.5	υ	<1.5	U
Acetone	31,200	4.1		5.0		13		<1.7	U	<1.7	υ	4.5	1	6.6		7.6	Ī	12		12		8.1		5.8		11		34	
trans-1,2-Dichloroethene	3.680	1.3	<u>. </u>	<1.0	U	<1.0	U	<1.0	υ	<1.0	U	<1.0	1 U	5.2		<2.5	U	<1.0	: U	<1.0	U ı	<1.0	U	<1.0	υ	<1.0	U	<1.0	υ
1,1-Dichloroethane	25.600	8.4	Î i	9.1		<1.00	U	6.8		11		<1.00	U	1.8	J	1.9	i J ;	< 0.99	Ü	<0.99	U	<0.99	U	<0.99	U	4.1		5.1	
cis-1,2-Dichloroethene	1.860	36		18	!	<1.0	U	3.0		2.8	-	<1.0	U	3.0		1.9	; J	<1.0	U	<1.0	U :	<1.0	υ	<1.0	U	<1.0	υ	<1.0	U
Chloroform	340	15		19		<0.83	U	2.1		4.4	-	4.9	1	9.4	1 1	8.9		< 0.82	່ ບ	< 0.82	U.	<0.82	υ	< 0.82	υ	< 0.82	U	< 0.82	U
1,2-Dichloroethane	360	<1.00	U	<1.00	U	<1.00	U	<1.00	υ	<1.00	U	<1.00	ι υ ;	<2.5	U	<2.5	U	<0.99	U	<0.99	U	<0.99	U	<0.99	U	< 0.99	U	< 0.99	υ
1,1,1-Trichloroethane	36,800	1.8	ì	2.3	!	< 0.74	U	4.2		7.2		41		37		22	1	<0.73	U	<0.73	U :	<0.73	i U	1.9		0.85		0.98	
Benzene	200	1.7		1.3	1	1.2	J	0.97		1.3	- i	0.85	' 1	<3.1	U	<3.1	U	<1.3	i U	<1.3	U	1.7	1	<1.3	U	<1.3	U	<1.3	U
Carbon Tetrachloride	68	<0.64	U	<0.64	U	< 0.64	υ	<0.64	U	< 0.64	U	< 0.64	υ	<1.6	U	<1.6	U	<0.64	υ	< 0.64	U	<0.64	1 U	< 0.64	U	< 0.64	U	< 0.64	Ü
1,2-Dichloropropane	186	<0.87	U	<0.87	υ	< 0.87	U	<0.87	U	< 0.87	U	< 0.87	U	<2.2	U	<2.2	U	<0.87	U	< 0.87	U	< 0.87	U	<0.87	U	<0.87 i	U	< 0.87	U
Trichloroethene	822	670	-	710	l j	10		660	i	890	i i	3,200	1	5,400	1	4,100	1 1	<0.74	U	4.4		9.4		4.6		1.1		1.2 ;	
1,1,2-Trichloroethane	440	<0.74	<u>Ü</u>	<0.74	U	<0.74	U	<0.74	U	< 0.74	U	<0.74	U	<1.9	U	<1.9	U	< 0.73	U	<0.73	U	<0.73	U	<0.73	υ	<0.73	U	<0.73	υ
Toluene	21,200	<1,1	U	0.93	i J	1.2		<1.1	U	<1.1	U	1.1		3.7		<2.7	U	2.1		<1.1	U !	7.6		1.1		<1.1	υ	<1.1	U
1,2-Dibromoethane	6	<0.53	U	<0.53	U	< 0.53	U	< 0.53	U	< 0.53	U	< 0.53	U	<1.3	U	<1.3	U	<0.52	υ	<0.52	U	< 0.52	U	<0.52	U	<0.52	υ	<0.52	U
Tetrachloroethene	1,064	29		37	1	3.8		170		210		26	i	210	i	190	i i	2.4		35		66		200		47		50	
Ethylbenzene	49.000	<0.92	U	<0.92	U	<0.92	U	<0.92	U	<0.92	U	<0.92	U	<2.3	U	<2.3	U	<0.92	U	<0.92	υΤ	1.3		<0.92	U	<0.92	U	<0.92	υ
m- & p-Xylenes	14,280	<0.92	U	<0.92	U	<0.92	U	<0.92	U	<0.92	l U l	0.76	J	4.1		<2.3	U	1.1		<0.92	υT	13		0.75	J	<0.92	U	0.58	J
o-Xylene	14,280	<0.92	U	<0.92	U	<0.92	U	<0.92	U	<0.92	U	<0.92	U	1.9	J	<2.3	U	<0.92	U	<0.92	U	4.4		<0.92	U	<0.92	U	< 0.92	U

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

U = analyte not detected.

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ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 9 of 13

											WELL	UNENTER	CICATIO	NI ANITO AI	IAL VTI	CAL DECL	11 TC (.hl										rage 9 of 13
l	SOIL GAS										WELL	IDENTII				CAL RESU		odv, uniess	notea)									
PARAMETERS	THRESHOLD												WDI-V	APOR WE	LL - PRO	OBE DEPT	H (feet)											
	LIMIT (ppbv)	61-08	Qual	61-19	Qual	61-30	Qual	62-08	Qual	62-18	Qual	62-29	Qual	63-08	Qual	63-18	Qual	63-28	Qual	MP-1-05	Qual	MP-1-15	Qual	MP-2-05	Qual	MP-2-15	Qual	01-35d Qual
Nonmethane Organics as		47		320	1	120	1	230	1 1	98		99	1	47		36		26	i	19	1	47,000		9.6	1	76,000		28
methane (ppmv)			<u> </u>		j		1		1				į	.,	1				<u> </u>		1	1	<u>i i</u>	7.0	Į.	70,000		
Methane (ppmv)	12,500°°	2.2		160	ì	44	i	28,600	1	1,400		2.200	1	4.900	:	< 0.50	U	< 0.50	U	90	ļ	851,000	<u> </u>	4.6		840,000	1	18
Vinyl chloride	25	<1.6	U	55	İ	< 3.9	U	6.9		14	i +	24	i	5.1		<1.6	U	<1.6	; U_	<1.6	ı U	<2,300	υ	<1.6	U	<1,600	U	(2)
Chloroethane	75,200	<1.5	l U ,	<7.6	υ	<3.8	' U i	1.6		<3.8	ĺυ.	<3.8	U	<1.5	U	<1.5	U	<1.5	l u_	<1.5	U	<2,300	U	<1.5	U	<1,500	U	
Acetone	31,200	12		<8.4	υ	<4.2	U	7.6	1	11	1	5.8	<u> </u>	60		8.2		13		<1.7	U	<2,500	U	12		<1,700	υ¦	
trans-1,2-Dichloroethene	3.680	<1.0	U	<5.0	υ	<2.5	υ	<1.0	υ :	<2.5	U	<2.5	U	<1.0	υ	<1.0	U	<1.0	U	<1.0	ιυ	<1,500	U	<1.0	U	<1.000	U	
1,1-Dichloroethane	25,600	0.67	J	38	i	39	_ !	<1.00	U	. <2.5	U	<2.5	U	<1.00	U	<1.00	U	<1.00	U	< 0.99	υ	<1,500	U	<0.99	U	<990	U	
cis-1,2-Dichloroethene	1,860	<1.0	U	6.5	1	<2.5	υ	0.92	} }	<2.5	U	4.4		<1.0	υ	<1.0	บ	<1.0	· υ	<1.0	U	<1.500	υ	<1.0	υ	<1.000	υ	:
Chloroform	340	1.3	1 ;	<4.1	υ	<2.0	υ	< 0.83	υ	<2.1	υ	<2.1	U	< 0.83	U	0.61	J	0.96	i	< 0.82	U	<1.200	υ	< 0.82	U_!	<820	U	i
1,2-Dichloroethane	360	< 0.99	υ	<4.9	υ	<2.5	U	<1.00	U	<2.5	! U :	<2.5	; U	<1.00	Uξ	<1.00	U	<1.00	υ	< 0.99	υ	<1,500	U	<0.99	U	<990	υ	
1,1,1-Trichloroethane	36,800	1.6	i	6.8	1	20	; ;	<0.74	U	<1.9	U	<1.9	U	1.1		0.74	U	1.3		8.5		<1,100	U	< 0.73	υ,	<730	U	
Benzene	200	<1.3	U	13	:	<3.1	¹ U	4.9		<3.1	U	<3.1	U	1.1	<u> </u> j	<1.3	U	<1.3	U	<1.3	U	<1,900	U	<1.3	υ	1,300		1
Carbon Tetrachloride	68	<0.64	υ	<3.2	U	<1.6	υ	<0.64	U	<1.6	יט	<1.6	į U	< 0.64	U	< 0.64	υi	< 0.64	υ	< 0.64	U	<950	U	<0.64	U	<640	U !	1
1,2-Dichloropropane	186	< 0.87	U	57		! 24	i	<0.87	U	<2.2	U '	<2.2	U	<0.87	ַ ' ט	< 0.87	U i	< 0.87	Ü	<0.87	U	<1,300	U	<0.87	U	<870	U	1
Trichloroethene	822	2.5	i i	<3.7	i U	2.2	1 1	<0.75	υl	<1.9	U	<1.9	U	2.4	1	9.0		18		< 0.74	υ	<1,100	U	<74	U	<740	U	
1,1,2-Trichloroethane	440	< 0.73	υ	<3.7	U	<1.8	ΙUΙ	<0.74	U	<1.9	U	<1.9	i U	< 0.74	U	<0.74	υi	<0.74	Ü	< 0.73	υ	<1,100	U	<0.73	υĪ	<730	U i	
Toluene	21.200	<1.1	U	_5.7	i	<2.7	U	2.7		<2.7	U	<2.7	U	1.6	TT	<1.1	U	<1.1	ΙU	<1.1	U	<1.600	U i	<1.1	U	<1.100	U	
1,2-Dibromoethane	6	< 0.52	υ	<2.6	υ	<1.3	U	< 0.53	ו ט	<1.3	U	<1.3	U	< 0.53	l U :	< 0.53	υ	< 0.53	U	<0.52	υ	<780	U	<0.52	U	<520	υl	
Tetrachloroethene	1,064	38	!	26	İ	47	i j	< 0.60	U	1.7		<1.5	l U	1.6		93		170		6.6	<u> </u>	<890	U I	160	1	<590	U	
Ethylbenzene	49,000	<0.92	U	6.5		<2.3	U	<0.94	U	<2.3	U	<2.3	υ	< 0.92	U	< 0.92	U	< 0.92	U	<0.92	U	<1,400	U	<0.92	U	<920	U	
m- & p-Xylenes	14,280	<0.92	U	15		<2.3	U	4.5		<2.3	υ	<2.3	U	1.3		< 0.92	U	< 0.92	U	<0.92	υ	<1,400	υ	<0.92	U	<920	U	
o-Xylene	14,280	<0.92	U	<4.6	U	<2.3	υ	1.3		<2.3	U	<2.3	U	<0.92	U	<0.92	U	<0.92	j U	<0.92	υ	<1,400	U	<0.92	U	<920	U	

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate fd = field duplicate fd limit shown).

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.(2) Duplicates may not have been performed on the same sample for each analysis.

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 10 of 13

																											Page 10	0
SOIL GAS										WEL	DENTIF	ICATIO	AND AN	NALYTI	CAL RES	ULTS (p	pbv, unless	noted)										
THRESHOLD												WDJ-V	POR WE	LL - PRO	OBE DEP	TH (feet)			_									
LIMIT (ppbv)	01-35fd	Qual	02-35d	Qual	03-35d	Qual	05-29d	Qual	08-35d	Qual	10-35fd				 		23-36d	Qual	25-35fd	Qual	25-35fdd	Qual	26-35d	Qual	27-35d	Qual	30-35d + C	Qual
					(2)		91		40		86		90		360		110	-	7 200		: (2)	;	6.7	1	(2)		33	
	20 .		100	!	(2)				40	i j		1		1	. 500		110		7,200		1 (2)	:	1 0.7	1	(2)	!	1	
12,500°°	18		900	•		: 1	< 0.50	U	1.3		1.6	<u> </u>	1.6		220		310	1	148,000			:	0.82	1			280	
25	<1.6	U	(2)	1	<1.6	U	(2)		(2)	:	<7.8	i	(2)	1	(2)	1	(2)		<200	υ	<200	υ	(2)	1	<1.6	U	(2)	
75,200	<1.5	U		İ	<1.5	U				i	<7.6	· U		i .				:	<190	υ	<190	. U	1	1 .	<1.5	υ		
31,200	3.8				<1.7	U					<8.4	U		i !	I	j ·			330		210	j		1	12		1	
3,680	<1.0	U		1	<1.0	U '				1	<5.0	υ							<130	U	<130	· U	1		<1.0	υ		
25.600	<1.00	U		} .	<1.00	υ				i i	91	i				! !		1	<120	υ	<120	υ	1	1	<1.00	U i		
1,860	<1.0	U		i	<1.0	U				1	33	:				. 1			<130	U .	<130	U			<1.0	U:		
340	0.54	j			< 0.83	. ย					<4.1	U						,	<100	U	<100	υ			< 0.83	υ		
360	<1.00	U			<1.00	U				1 :	<4.9	U	•					7	<120	U	<120	υ	1		<1.00	υ		
36,800	<0.74	U			<0.74	U		i			<3.7	U		: 1				i	<92	U	<92	υ	!		<0.74	U	1	
200	<1.3	U			3.0			1			<6.3	U		!		:			<160	U	<160	U	1		1.9	İ	1	
68	<0.64	U		ì ;	<0.64	U				i i	<3.2	U						1	<80	U	<80	U			<0.64	U	l l	
186	<0.87	U		i	< 0.87	υ				!	<4.3	U				!		i	<110	U	<110	υ		i '	< 0.87	U	i	
822	<0.75	υ			4.5						<3.7	U '		:		!		i	<93	υ	<93	υ	1	:	<0.75	Ü		
440	<0.74	U]	<0.74	U					<3.7	U		1 1		1 1		:	<92	υ	<92	U	1	L I	<0.74	U :		
21,200	3.0			j	5.9	:					<5.3	U		i l		1			<130	U	<130	U	!		13	1		
6	<0.53	U			<0.53	U					<2.6	U		!		!		i i	<65	U	<65	υ	!		< 0.53	U	i	
1,064	9.3			i	100						4.0	! !		: 1				1	<74	U	<74	U		!	2.4			
49.000	<0.92	U			1.1					1 1	<4.6	U		1					350		300		į.	i	9.4			
14,280	1.4				4.7	i					<4.6	υ		i l		1 i			<120	U	<120	l U	i	1	51			
14.280	<0.92	U			1.1			i			<4.6	U						1	<120	U	<120	υ			22			
	THRESHOLD LIMIT (ppbv) 12,500° 25 75,200 31,200 3,680 25,600 1,860 340 360 36,800 200 68 186 822 440 21,200 6 1,064 49,000 14,280	THRESHOLD LIMIT (ppbv) 01-35fd 28 12.500" 18 25 <1.6 75.200 <1.5 31.200 3.8 3.680 <1.0 25.600 <1.00 1.860 <1.0 340 0.54 360 <1.00 36.800 <0.74 200 <1.3 68 <0.64 186 <0.87 822 <0.75 440 <0.74 21,200 3.0 6 <0.53 1.064 9.3 49.000 <0.92 14,280 1.4	THRESHOLD LIMIT (ppbv) 28 12,500" 18 25 <1.6 U 75,200 <1.5 U 31,200 3.8 3,680 <1.0 U 25,600 <1.00 U 25,600 <1.00 U 340 0,54 J 360 <1.00 U 36,800 <0.74 U 200 <1.3 U 68 <0.64 U 186 <0.87 U 822 <0.75 U 21,200 3.0 6 <0.53 U 21,200 3.0 6 <0.53 U 1,064 9.3 49,000 <0.92 U 14,280 1.4	THRESHOLD LIMIT (ppbv) 01-35fd Qual 02-35d	THRESHOLD LIMIT (ppbv) 28 160 12,500° 18 900 25 <1.6 U (2) 75,200 <1.5 U 31,200 3.8 3.680 <1.0 U 25,600 <1.00 U 1,860 <1.00 U 340 0,54 J 360 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.3 U 68 <1.00 <1.3 U 68 <1.00 1.00	THRESHOLD LIMIT (ppbv) 28 160 28 160 25 <1.6 0.1.5 0.1.5 0.1.5 0.1.5 0.1.5 0.1.5 0.1.6 0.1.5 0.1.7 0.1.5 0.1.0	THRESHOLD LIMIT (ppbv) 28 160 (2) 12,500" 18 900 25 <1.6 U (2) 31,200 3.8 <1.7 U 31,200 3.8 <1.7 U 3,680 <1.0 U 25,600 <1.00 U 340 0,54 J 360 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 <1.00 U 36,800 18 00 18 18	THRESHOLD LIMIT (ppbv) 28 160 28 160 (2) 91 12,500° 18 900 <	THRESHOLD LIMIT (ppbv) 01-35fd Qual 02-35d Qual 03-35d Qual 05-29d Qual 28	THRESHOLD LIMIT (ppbv) 01-35fd Qual 02-35d Qual 03-35d Qual 05-29d Qual 08-35d 28	THRESHOLD LIMIT (ppbv) 01-35fd Qual 02-35d Qual 03-35d Qual 05-29d Qual 08-35d Qual 28	THRESHOLD LIMIT (ppbv) O1-35fd Qual O2-35d Qual O3-35d Qual O5-29d Qual O8-35d Qual O3-35fd Qual O3-35fd Qual O5-29d Qual O8-35d Qual O3-35fd O3-35f	THRESHOLD Climit (ppbv) Ol-35fd Qual O2-35d Qual O3-35d Qual O5-29d Qual O8-35d Qual O1-35fd Qual	THRESHOLD CLIMIT (ppbv) O1-35fd Qual O2-35d Qual O3-35d Qual O3-35d Qual O3-35d Qual O3-35fd O3-35fd	THRESHOLD CLIMIT (ppbv) O1-35fd Qual O2-35d Qual O3-35d Qual O5-29d Qual O8-35d Qual O3-35fd O3-35fd Qual O3-35fd	THRESHOLD LIMIT (ppbv) Ol - 35fd Qual 02-35d Qual 03-35d Qual 05-29d Qual 08-35d Qual 10-35fd Qual 10-35fd Qual 14-35d Qual 1	THRESHOLD Company Co	THRESHOLD LIMIT (ppbv) 01-35fd Qual 02-35d Qual 03-35d Qual 05-29d Qual 08-35d Qual 10-35fd Qual 10-35fd Qual 10-35fd Qual 14-35d Qual 23-36d	THRESHOLD LIMIT (ppb)	THRESHOLD LIMIT (ppby) 01-35fd Qual 02-35d Qual 03-35d Qual 05-29d Qual 08-35d Qual 10-35fd Qual 10-35fd Qual 10-35fd Qual 14-35d Qual 23-36d Qual 25-35fd 28	THRESHOLD LIMIT (ppby)	THRESHOLD LIMIT (ppby)	THRESHOLD LIMIT (ppby)	THRESHOLD LIMIT (pphy) 10-35fd Qual 03-35d Qual 03-35d Qual 05-29d Qual 08-35d Qual 08-35d Qual 08-35d Qual 03-35fd Qual 10-35fd Qual 14-35d Qual 23-36d Qual 25-35fd Qual 25	THRESHOLD LIMIT (ppby) 01-3576 Qual 02-35d Qual 03-35d Qual 05-29d Qual 08-35d Qual 05-29d Qual 08-35d Qual 10-3576d Qual 10-3576d Qual 14-35d Qual 23-36d Qual 25-3576d Qual 25-3576d Qual 25-3576d Qual 26-35d Qual 12-3576d Qual 25-3576d Q	THRESHOLD THRE	THRESHOLD District Column	THRESHOLD Di-35f Qual 02-356 Qual 02-356 Qual 03-350 Qual 05-290 Qual 08-356 Qual 10-356 Qual 10-356 Qual 14-356 Qual 23-356 Qual 25-356d Qual 25-356d Qual 25-356d Qual 25-356d Qual 27-356 Qual 30-356 Qual

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

U = analyte not detected.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 11 of 13

	SOIL GAS										WEL	L IDENTII	FICATIO!	AND AN	NALYTI	ICAL RES	ULTS (p	pbv, unless	noted)									
PARAMETERS	THRESHOLD					_	-						WDI-V	POR WE	LL - PR	OBE DEP	TH (feet))										
	LIMIT (ppbv)	30-35fd	Qual	31-10fd	Qual	31-10d	Qual	33-10d	Qual	34-10fd	Qual	35-10d	Qual	35-38d	Qual	41-20d	Qual	42-10d	Qual 43-19d	Qual	44-30d	. Qual	45-30fd	Qual	47-30d	Qual	48-08d	Qual
Nonmethane Organics as	Ī	35	1	5 1	:	(2)		65		37		(2)		85		(2)		40	(2)		(2)	i	860		(2)	:	9.000	
methane (ppmv)			! :		<u> </u>	(2)		0.5	, ;			(-)			l	(2)			1 (2)		(=)	1			(-/		71000	i .
Methane (ppmv)	12,500**	290	i :	< 0.50	U	i		1.3		1.2			i	8.1			1	1.5					11,100				(2)	
Vinyl chloride	25	<1.6	U	<1.6	U	<1.6	U	<1.6	U	<1.6	U	<3.9	; U :	(2)		<1.6	U	(2)	430		<20	U	77	i	<3.9	U		L
Chloroethane	75,200	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<1.5	U	<3.8	U		j	<1.5	U		<15	υ	<19	υ	<38	U	<3.8	U		[
Acetone	31,200	<1.7	U	9.6	i	11		<1.7	U	<1.7	U	21	:			2.7	!		<17	U_	<21	U	<42	U	6.3			
trans-1,2-Dichloroethene	3.680	<1.0	U	<1.0	U	<1.0	U	<1.0	υ	<1.0	U	<2.5	! ប		i	<1.0	υ		8.3	J	<13	U	<25	U	<2.5	U		
1,1-Dichloroethane	25.600	<1.00	U.	< 0.99	ı_U	<0.99	U	< 0.99	U	< 0.99	U	<2.5	l U ;			< 0.99	U		<9.9	υ	62	i	<25	U !	<2.5	U		
cis-1,2-Dichloroethene	1,860	0.85	J	<1.0	U	<1.0	U	<1.0	, U	<1.0	U	<2.5	υ			<1.0	υ		<10	υ	<13	į U	<25	U	<2.5 ·	U	1	
Chloroform	340	0.64	J.	< 0.82	U	<0.82	U	0.75	j j	< 0.82	U	<2.0	υ			<0.82	U		<8.2	U	<10	U	<20	U	<2.0	υ	;	
1,2-Dichloroethane	360	<1.00	U	< 0.99	υ	<0.99	υ	< 0.99	U	<0.99	U	<2.5	U			< 0.99	lυ		<9.9	υ	<12	U	<25	υ	<2.5	υj		
1,1,1-Trichloroethane	36,800	< 0.74	υ	< 0.73	υ	<0.73	U	44	!	31	i i	12				16			<7.3	U	670	1	<18	U	<1.8	U		
Benzene	200	<1.3	U	<1.3	U	<1.3	U	<1.3	U	1.3		<3.1	υ			<1.3	U		! 12	J	<16	U	30	J i	<3.1	υ		
Carbon Tetrachloride	68	<0.64	U	< 0.64	U	<0.64	U	< 0.64	U	< 0.64	U	<1.6	U]	<0.64	U		<6.4	U_	<8.0	U	<16	U	<1.6	U	I	
1,2-Dichloropropane	186	<0.87	U	< 0.87	i U	<0.87	U	< 0.87	lυ!	< 0.87	U	<2.2	U			< 0.87	U		<8.7	U :	<11	U	<22	U	<2.2	U	1	
Trichloroethene	822	17		< 0.74	U	<0.74	U	< 0.74	U	< 0.74	U	66	1			< 0.74	U		<7.4	U :	<9.3	י ט	<19	U	1.3	J		
1,1,2-Trichloroethane	440	< 0.74	U	< 0.73	U	<0.73	U	< 0.73	U	< 0.73	U	<1.8	υ		l	<0.73	U		<7.3	υ	<9.2	υ	<18	υ	<1.8	υ		
Toluene	21,200	1.8		<1.1	U	<1.1	U	<1.1	! U	0.88]	<2.7	U			<1.1	U		8.6	J	<13	U	<27	U	<2.7	U		L
1,2-Dibromoethane	6	<0.53	U	< 0.52	U	< 0.52	U	<0.52	υ	< 0.52	U	<1.3	U		i i	<0.52	U		<5.2	U !	<6.5	U	<13	U	<1.3	U		i
Tetrachloroethene	1,064	240		14		15	1	1.3		2.1		4.9				27			7.3		<7.4	U	29		13			
Ethylbenzene	49,000	<0.92	υ	<0.92	υ	< 0.92	U	<0.92	U	< 0.92	U	<2.3	υ			<0.92	υ		<9.2	υ	<12	U	<23	U	<2.3	U		1
m- & p-Xylenes	14,280	1.1		0.71	J	< 0.92	U	0.56	J	0.64	J	<2.3	U			<0.92	U		7.7	J	<12	U	21	J _	<2.3	U		-
o-Xylene	14,280	<0.92	U	< 0.92	U	<0.92	U	<0.92	υ	<0.92	U	<2.3	U			<0.92	U		<9.2	U	<12	U	<23	Ü	<2.3	U		

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field du

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

																											Page	e 12 of 13
	SOIL GAS										WELI	DENTI	ICATIO	N AND A	NALYTI	ICAL RES	ULTS (p	pbv, unless	noted)									
PARAMETERS	THRESHOLD												WDI-V	APOR WI	ELL - PR	OBE DEP	ΓH (feet)											
	LIMIT (ppbv)	48-35fd	Qual	51-30d	Qual	52-10fd	Qual	53-30d	Qual	54-12d	Qual	55-29d	Qual	56-08d	Qual	57-07d	Qual	59-07fd	Qual	59-27d	Qual	60-10d	Qual	61-19d	Qual M	P-1-05d Qual	62-29d	¹ Qual
Nonmethane Organics as methane (ppmv)		750	:	(2)		170		(2)		9.4		(2)	i	37	: 	(2)	1	6.7		30		(2)		320	:	17	110	
Methane (ppmv)	12.500**	16,700				140	1		! !	65	-		ŀ	19	i	1	1	5.5	į .	1.3			i	150	;	85	2.200	i
Vinyl chloride	25	<20	U I	15	J	<3.9	U	<16	U I	(2)	1 1	85		18	1	<1.6	ΙU	<1.6	⊥ U :	(2)	i i	<1.6	. U	(2)		(2)	(2)	1
Chloroethane	75.200	<19	Ü	<19	U	12		<15	U			<15	\ U	<1.5	U	<1.5	↓ U	<1.5	U		ļ	≤1.5	U	i	l	. !		T
Acetone	31.200	<21	Ui	<21	U	20	1	<17	U			<17) U	<1.7	U	12	!	17				6.0	!	1				Ţ
trans-1,2-Dichloroethene	3.680	<13	U	110		<2.5	U	<10	U			60		! 16		<1.0	U	<1.0	U			<1.0	Ù	t		1		1
1,1-Dichloroethane	25,600	<12	υ	14		73		11			1. 1	8.1	J	9.7		<1.00	l U	<0.99	U		1	<0.99	: U	1			1	T
cis-1,2-Dichloroethene	1.860	<13	υ	180		<2.5	υ	7.8	J			250		300		<1.0	ıυ	<1.0	U			<1.0	·υ		:		1	
Chloroform	340	<10	U	<10	U	<2.1	U	<8.2	U			<8.2	; U	< 0.83	U	< 0.83	U	< 0.82	U			< 0.82	U	1			-	Ī
1,2-Dichloroethane	360	<12	U	<12	U	<2.5	U	<9.9	U		1 1	<9.9	U	<1.00	U	<1.00	U	<0.99	U		i	<0.99	U	!		1	1	
1,1,1-Trichloroethane	36,800	<9.2	. U	<9.3	į U	<1.9	U	<7.3	U ;			<7.3	l U	<0.74	U	< 0.74	U	< 0.73	U			1.9	1		:			
Benzene	200	<16	U	39	1	2.8	J	<13	U		1	8.3	J	24	1	1.1	J	<1.3	U		:	<1.3	† U			1	1	1
Carbon Tetrachloride	68	<8.0	U	<8.0	U	<1.6	U	<6.4	U			<6.4	U	<0.64	U	< 0.64	U	<0.64	U			< 0.64	l U	ļ.		!	!	T
1,2-Dichloropropane	186	<11	υ	<11	U	29	Ţ	<8.7	U			<8.7	υ	<0.87	U	< 0.87	U	<0.87	U			<0.87	U		l i	1		ī
Trichloroethene	822	<9.3	U	420	<u> </u>	1.9	3	910	i		1	640	-	140		9.6	,	< 0.74	U,			4.5	Į.		!	I	ļ	
1,1,2-Trichloroethane	440	<9.2	U	<9.3	U	<1.9	υ	<7.3	υ			<7.3	U	<0.74	! U	< 0.74	U	<0.73	i U			<0.73	U					į
Toluene	21,200	<13	U	<13	U	6.8		<11	U		1 1	<11	υ	1.5	1	1.2		<1.1	U			1,1				i		
1,2-Dibromoethane	6	<6.5	U	<6.6	U	<1.3	U	<5.2	U		i	<5.2	U	< 0.53	υ	<0.53	U	<0.52	U		1	<0.52	U	i	1	İ	i i	T
Tetrachloroethene	1,064	31		460		7.7		57				9.4		47		3.6		2.5	ii		Ι Τ	170			-			Ī
Ethylbenzene	49,000	<12	U	<12	U	<2.3	U	<9.2	U			<9.2	U	0.71	j	<0.92	U	<0.92	U			<0.92	l u				i	
m- & p-Xylenes	14,280	<12	U	<12	U	3.8		<9.2	U			<9.2	U	2.7		<0.92	U	< 0.92	į U			0.76	J					T
o-Xylene	14,280	<12	υ	<12	U	<2.3	U	<9.2	U			<9.2	U	0.73]	< 0.92	U	< 0.92	υ			< 0.92	U					Ī

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

⁽²⁾ Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

VAPOR WELL ANALYTICAL DATA FOR OCTOBER 1998 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

	SOIL GAS							 	 WEI	L IDENT	IFICATIO	N AND AN	ALYTIC	L RESU	_TS (ppbv,	, unless note	ed)								
PARAMETERS	THRESHOLD										WDI-V	APOR WEI	L - PROE	E DEPTH	l (feet)										****
	LIMIT (ppbv)	62-29fd	Qual	62-29fdd	Qual	1			1		:		-	ŀ	:	;				1	;				
onmethane Organics as ethane (ppmv)		110		110	i 1								i						!		;			:	
lethane (ppmv)	12,50011	2.300		2.300	ĺ		1	1 1		1	į .			:					1		: i				!
inyl chloride	25	24		(2)	+		1 1			į		!				:			1	1	1	1			
hloroethane	75.200	<3.8	υ				!	1 :			;								i		1	T			
cetone	31.200	6.3			1		_1				1			1							1	i		i	
ns-1,2-Dichloroethene	3.680	<2.5	. U					 <u> </u>	!				1	ļ		i			i	;	1		:		
1-Dichloroethane	25.600	<2.5	U i		į		i I	1 :	1				i				i					i	1		-
s-1,2-Dichloroethene	1.860	4.2						1 .		1				1											
hloroform	340	<2.1	U		į.			 1		<u> </u>			1	1				1	1	t					
2-Dichloroethane	360	<2.5	U				1	 1	 * 1			ii		i				i		į		i			
1,1-Trichloroethane	36,800	<1.9	U				1 1		 	<u> </u>	;			1		1	:	1	i						i
enzene	200	<3.1	U :		·		1 1	 1 1						1		:	<u> </u>	i i		<u> </u>	1	1	i		
arbon Tetrachloride	68	<1.6	U ;						 i .				į.				i			i	:		i		
2-Dichloropropane	186	<2.2	υ		i			1 (į .					i	1	1		1		}	1				
ichloroethene	822	<1.9	U i		1			 i i	 							:	!	i .	1	1					
1,2-Trichloroethane	440	<1.9	U					 1 1						ļ	ļ ļ		1	1		i				I	-
luene	21,200	<2.7	U						<u> </u>					į	1				i.						- 1
2-Dibromoethane	6	<1.3	U		i				 1				1	1		1	;								
trachloroethene	1,064	<i.5< td=""><td>U</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></i.5<>	U														1								
rylbenzene	49,000	<2.3	U					 i I									!								
& p-Xylenes	14,280	<2.3	U				!		Ī																
Xylene	14,280	<2.3	U		1														į		1				

J = analyte detected below reporting detection limit.

ppmv = parts per million by volume ppbv = parts per billion by volume d = lab duplicate fd = field duplicate Bold Numbers = Concentrations above threshold limits. Italicized numbers = Concentrations above site-boundary threshold limits (one-half the soil gas threshold limit shown).

⁽¹⁾ The site boundary threshold level for methane is used for all comparisons.(2) Duplicates may not have been performed on the same sample for each analysis.

U = analyte not detected.

SUMMARY OF TREND DATA FOR SELECTED SOIL GAS WELLS FOR ACETONE, BENZENE, ETHYLBENZENE,

M- & P-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 6

SAMPLE	LOCATION	CONCETTUENTO		19	998			19	99	ige I of 6
NUMBER	L	CONSTITUENTS ⁽¹⁾	IstQ	2ndQ	3rdQ	4thQ	1stQ	2ndQ	3rdQ	4thQ
		Acetone	2.8	ND	2.6	3.6	4.0	5.6	11.0	8.5
	1	Benzene	ND	ND	ND	ND	1.6	ND	ND	ND
	1	Ethylbenzene	ND	ND	ND	ND	0.9	ND	1.1	1.1
	9843 S. Greenleaf Ave in	m- & p-Xylene	1.6	ND	1.2	ND	6.0	ND	4.2	3.8
VW-30-07	Area 5 near the east front	Methane	4.8	9.8	1.5	1.1	2.3	11.0	1.5	ND
	corner of the building	PCE	1.7	2.5	3.1	2.7	2.3	1.6	8.2	1.9
	[Toluene	2.4	1.4	2.2	1.7	5.6	ND	4.0	6,7
	ł (TCE	0.69	0.51	1.0	ND	ND	ND	2.7	ND
	<u>,</u>	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND
	1	Benzene	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	0.9	ND	ND	ND	ND	ND
	9843 S. Greenleaf Ave in	m- & p-Xylene	2.1	ND	3.9	ND	ND	ND	ND	0.74
VW-30-23	Area 5 near the east front	Methane	9,200	12,000	1,300	32.0	17.0	19.0	1.9	0.91
	corner of the building	PCE	32.0	27.0	55.0	220	210	190	190	180
	1	Toluene	2.7	0.72	2.0	1.0	ND	_ND	ND	2.4
	1	TCE	32.0	21.0	10.0	6.6	3.4	4.8	3.2	2.7
	l i	Vinyl Chloride	ND	1.3	ND	ND	ND	ND	ND	ND
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
	9843 S. Greenleaf Ave in	m- & p-Xylene	2.3	ND	1.3	ND	ND	ND	0.75	0.61
VW-30-35	Area 5 near the east front	Methane	11,000	13,000	3,380	290	130	84	15	7.2
	corner of the building	PCE	46	39	67	250	250	210	220	220
		Toluene	4.0	1.1	2.2	1.1	ND	ND	ND	2.1
	į į	TCE	76.0	40.0	23.0	17.0	7.8	7,1	5.0	4.8
	1	Vinyl Chloride	5.5	2.7	1.3	ND	ND	ND	ND	ND
		Acetone			7.7	7.1	5.9	7.9	8.5	2.4
	1	Benzene			ND	1.7	ND	ND	ND	1.0
	1	Ethylbenzene			ND	ND	ND	ND	0.64	1.2
	[m- & p-Xylene			2.3	2.5	ND	ND	3.3	5.3
VW-42-10	In the east corner of Area 2	Methane			2.0	1.3	ND	0.91	ND	ND
	next to Area 3	PCE			6.2	8.5	4.2	4.7	7.0	5.3
	<u>[</u>	Toluene			3.1	3.8	ND	0.67	1.8	5.6
	1	TCE			ND	ND	ND	0.80	ND	ND
	1	Vinyl Chloride			ND	ND	ND	ND	ND	ND

⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).



ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold number show concentrations that exceeded 50 percent of the Soil Gas Interim Threshold Screening Levels (ITSLs). ITSLs: acetone (7,800 ppbv); benzene (50 ppbv); ethylbenzene (12,250 ppbv); m- & p-xylenes (3,570 ppbv); methane (6,250 ppmv); PCE (266 ppbv); TCE (205.5 ppbv); toluene (5,300 ppbv) and vinyl chloride (6,25 ppbv).

SUMMARY OF TREND DATA FOR SELECTED SOIL GAS WELLS FOR ACETONE, BENZENE, ETHYLBENZENE.

M- & P-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE WASTE DISPOSAL, INC. SUPERFUND SITE

Page 2 of 6

SAMPLE	LOCATION	oon ammus needl		19	98			19	99	
NUMBER	ECCATION	CONSTITUENTS ⁽¹⁾	IstQ	2ndQ	3rdQ	4thQ	1stQ	2ndQ	3rdQ	4thQ
		Acetone			3.4	5.8	1.2	6.5	9.5	41.0
		Benzene			ND	4.3	ND	ND	ND	1.1
		Ethylbenzene			ND	2.5	ND	ND	0.7	1.2
		m- & p-Xylene			2.3	11.0	ND	ND	3.6	5.5
VW-42-30	In the east corner of Area 2	Methane			ND	ND	ND	ND	53.0	ND
	next to Area 3	PCE			9.3	13.0	7.9	8.7	8.8	8.9
		Toluene			2.9	25.0	ND	ND	1.9	6.2
	l '	TCE			ND	0.93	ND	ND	ND	ND
		Vinyl Chloride			ND	ND	ND	ND	ND	ND
		Acetone			ND	ND	ND	ND	ND	ND
		Benzene			9.90	32,000	9,500	23,000	28,000	45,00
	1	Ethylbenzene		·····	0.97	6,000	1,500	4,900	5,900	8,700
	1	m- & p-Xylene			6.00	23,000	5,900	18,000	23,000	32,00
VW-45-12	In the west corner of Area 2	Methane			213,000	260,000	173,000	179,000	176,000	168,00
	next to the building	PCE		-	ND	ND	ND	ND	ND	ND
		Toluene			7.20	39,000	8,400	20,000	21,000	24,00
		TCE			0.26	ND	ND	ND	290	ND
		Vinyl Chloride			55.00	140,000	31,000	75,000	70,000	66,00
	1	Acetone	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	570	2,800	4.7	1,800	7,200	7,300	2,200	3,600
	1	Ethylbenzene	230	210	ND	ND	2,300	5,400	4,100	3,60
		m- & p-Xylene	ND	350	ND	570	9,600	13,000	7,600	8,20
VW-45-22	In the west corner of Area 2	Methane	61,000	63,100	90,200	101,000	97,700	120,000	12,800	168,0
	next to the building	PCE	ND	ND	ND	ND	ND	ND	ND	ND
		Toluene	100	770	0.72	600	13,000	12,000	2,800	2,200
		TCE	530	240	ND	ND	ND	ND	ND	ND
	Į.	Vinyl Chloride	380	6,500	87	38,000	16,000	27,000	17,000	17,00
-		Acetone	100	ND	ND	ND	ND	ND	ND	ND
	1	Benzene	380	41	ND	32	44	33	25	ND
	1	Ethylbenzene	39	ND	ND	ND	ND	ND	ND	ND
	1	m- & p-Xylene	110	ND	ND	21	ND	ND	ND	ND
VW-45-30	In the west corner of Area 2	Methane	32,000	14,300	27,800	11,200	18,000	17,000	18,000	17,80
•	next to the building	PCE	ND	ND	ND	24	14	10	ND	ND
	1	Toluene	47	ND	ND	ND	ND	ND	ND	ND
		TCE	17	ND	ND	ND	ND	ND	ND	ND
	1	Vinyl Chloride	ND	ND	ND	99	73	62	47	52

⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

Bold number show concentrations that exceeded 50 percent of the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (7.800 ppbv); benzene (50 ppbv); ethylbenzene (12,250 ppbv); m- & p-xylenes (3,570 ppbv);

methane (6,250 ppmv); PCE (266 ppbv); TCE (205.5 ppbv); toluene (5,300 ppbv) and vinyl chloride (6.25 ppbv).



ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

SUMMARY OF TREND DATA FOR SELECTED SOIL GAS WELLS FOR ACETONE, BENZENE, ETHYLBENZENE,

M- & P-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE WASTE DISPOSAL, INC. SUPERFUND SITE

Page 3 of 6

SAMPLE	LOCATION	CONSTITUENTS		19	998			19	199	ige 3 of 6
NUMBER		CONSTITUENTS	IstQ	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ
		Acetone			ND	ND	ND		ND	ND
		Benzene			7.1	11.0	ND		2.3	6.0
		Ethylbenzene			5.2	12.0	2.5		4.1	7.7
	9620 Santa Fe Springs Road	m- & p-Xylene			9.0	23.0	5.0		8.2	17.0
VW-46-07	in Area 1 just off the west	Methane			17,200	46,500	11,100		15,900	32,200
	corner of the building	PCE			1.5	ND	ND		ND	ND
		Toluene			11.0	15.0	3.6		4.6	12.0
		TCE			0.9	ND	ND		22.0	ND
	ł	Vinyl Chloride			2.6	4.8	ND		1.2	ND
		Acetone	2.1	8.8	4.1	14.0	4.9	10.0	16.0	ND
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
	9620 Santa Fe Springs Road	m- & p-Xylene	1.9	ND	1.5	1.4	ND	ND	ND	4.7
VW-46-15	in Area 1 just off the west	Methane	ND	ND	ND	ND	0.6	ND	ND	ND
	corner of the building	PCE	130	160	160	210	170	150	170	190
		Toluene	1.7	ND	2.8	2.0	ND	ND	6.0	5.1
	j	TCE	15.0	16.0	16.0	22.0	13.0	14.0	15.0	14.0
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone	11.0	6.0	2.3	6.4	5.6	12.0	21.0	6.0
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
	9620 Santa Fe Springs Road	m- & p-Xylene	1.6	ND	1.4	ND	ND	ND	ND	5.5
VW-46-27	in Area 1 just off the west	Methane	ND	ND	ND	ND	ND	ND	ND	ND
	corner of the building	PCE	220	230	190	230	210	190	210	180
		Toluene	2.1	ND	2.6	1.4	ND	1.8	ND	6.6
	}	TCE	31.0	28.0	21.0	29.0	19.0	23.0	20.0	18.0
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone	ND		ND	ND	NĐ	ND	ND	
		Benzene	2,200		820	1,300	810	880	680	
		Ethylbenzene	170		120	ND	42	ND	49	
	Į.	m- & p-Xylene	280		ND	ND	43	ND	51	
VW-48-08	In the RV Lot in Area 2	Methane	365,000		258,000	150,000	208,000	ND	184,000	
		PCE	ND		ND	ND	ND	ND	ND	
	1	Toluene	ND		ND	ND	41	ND	41	
	į .	TCE	ND		ND	ND	ND	ND	ND	
		Vinyl Chloride	480		750	490	450	420	510	

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Bold number show concentrations that exceeded 50 percent of the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (7,800 ppbv); benzene (50 ppbv); ethylbenzene (12,250 ppbv); m- & p-xylenes (3,570 ppbv);

methane (6,250 ppmv); PCE (266 ppbv); TCE (205.5 ppbv); toluene (5,300 ppbv) and vinyl chloride (6.25 ppbv).



ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

SUMMARY OF TREND DATA FOR SELECTED SOIL GAS WELLS FOR ACETONE, BENZENE, ETHYLBENZENE,

M- & P-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE WASTE DISPOSAL, INC. SUPERFUND SITE

SAMPLE		<u> </u>		10	198		_	10	199	age 4 of 6
NUMBER	LOCATION	CONSTITUENTS	IstO	2ndQ	3rdQ	4thO	1stO	2ndQ	3rdO	4thQ
		Acetone	ND	ND	ND	ND	ND	ND	ND	- 41110
		Benzene	6,700	4,100	4,200	4,200	2,900	7,100	3,500	
		Ethylbenzene	1,300	3,100	5,400	6,500	5,200	8,500	4.800	
		m- & p-Xylene	6,400	1,400	1,800	3,900	3,800	7,700	4,300	
VW-48-17	In the RV Lot in Area 2	Methane	539,000	441,000	592,000	517,000	356,000	ND	530,000	
		PCE	ND	ND	ND	ND	ND	ND	ND	
		Toluene	ND	ND	ND	ND	ND	ND	ND	
	ì	TCE	ND	ND	ND	ND	ND	ND	ND	
		Vinvl Chloride	ND	ND	ND	ND	ND	ND	ND	
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	12	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	17	ND	7.5	ND	ND	ND	ND	ND
		m- & p-Xylene	32	ND	ND	ND	ND	ND	ND	ND
VW-48-35	In the RV Lot in Area 2	Methane	37,000	31,600	27,500	16,600	13,500	ND	19,600	14,800
		PCE	18	21	15	52	30	27	28	ND
		Toluene	ND	ND	ND	ND	ND	ND	ND	ND
	1	TCE	ND	6.2	ND	15	ND	ND	ND	ND
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone					10	8.4	51	12
		Benzene					ND	ND	ND	ND
		Ethylbenzene					ND	ND	1.1	ND
	9843 S. Greenleaf Ave in	m- & p-Xylene					ND	ND	4.1	1.3
VW-51-08	Area 5 near the east rear	Methane					80	79	880	280
	corner of the building	PCE					0,63	0.61	1.2	0.68
		Toluene					0.72	ND	4.3	6.5
		TCE					0.45	ND	0.55	ND
		Vinyl Chloride					ND	ND	ND	ND
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	11	1,200	2,900	6,500	3,100	12,000	13,000	5,400
		Ethylbenzene	ND	ND	810	1,500	650	870	ND	340
	9843 S. Greenleaf Ave in	m- & p-Xylene	0.59	ND	410	ND	480	880	1,000	510
VW-51-18	Area 5 near the east rear	Methane	386,000	234,000	241,000	328,000	901,000	423,000	390,000	239,000
	corner of the building	PCE	ND	ND	ND	ND	ND	ND	ND	ND
	l .	Toluene	ND	ND	ND	ND	ND	ND	ND	ND
	l	TCE	ND	ND	ND	ND	ND	ND	ND	ND
	L	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND

⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

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methane (6,250 ppmv); PCE (266 ppbv); TCE (205.5 ppbv); toluene (5,300 ppbv) and vinyl chloride (6.25 ppbv).



ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

SUMMARY OF TREND DATA FOR SELECTED SOIL GAS WELLS FOR ACETONE, BENZENE, ETHYLBENZENE,

M- & P-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE WASTE DISPOSAL, INC. SUPERFUND SITE

Page 5 of 6

SAMPLE	LOCATION	CONSTRUCTION OF THE SECOND		19	98			19	99	age 5 of 6
NUMBER	LOCATION	CONSTITUENTS	1stQ	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	310	86	27	36	27	ND	ND	17
		Ethylbenzene	69	ND	ND	ND	ND	ND	ND	ND
	9843 S. Greenleaf Ave in	m- & p-Xylene	110	ND	1.8	ND	ND	ND	ND	ND
VW-51-30	Area 5 near the east rear	Methane	41,000	38,100	_ 78	13,300	18,900	22,300	23,400	23,800
	corner of the building	PCE	ND_	ND	1,400	420	570	200	120	83
		Toluene	40_	ND	1.9	ND	ND	ND	ND	ND
		TCE	200	130	300	400	1,000	550	500	540
		Vinyl Chloride	82	65	4.4	16	69	37		50
		Acetone				ND			ND	ND
	•	Benzene				ND			ND	ND
		Ethylbenzene				ND			ND	ND
	12803 Los Nietos Rd in	m- & p-Xylene				ND			ND	ND
VW-55-05	Area 8 located off the west	Methane				119,000			115,000	74,700
	back corner of the building	PCE				ND			ND	ND
		Toluene				ND			ND	ND
	ì	TCE				ND			ND	ND
	<u> </u>	Vinyl Chloride				ND			ND	ND
		Acetone				ND	ND	ND	ND	ND
		Benzene				20	13	20	13	12
		Ethylbenzene				ND	ND	ND	ND	ND
	12803 Los Nietos Rd in	m- & p-Xylene				ND	ND	11	ND	ND
VW-55-18	Area 8 located off the west	Methane				9,930	13,000	10,100	8,890	8,720
	back corner of the building	PCE				8.4	6.1	12	10	9.1
	į.	Toluene				ND	ND	ND	ND	ND
	į.	TCE				740	470	740	520	360
		Vinyl Chloride				87	73	110	65	50
	1	Acetone				ND	130	ND	ND	ND
		Benzene				8.7	ND	ND	6.4	5.2
		Ethylbenzene				ND.	ND	ND	ND	NĐ
	12803 Los Nietos Rd in	m- & p-Xylene				ND	ND	ND	ND	3.2
VW-55-29	Area 8 located off the west	Methane				8,760	11,000	8,760	8,430	7,300
	back corner of the building	PCE				10	9.0	9.2	12	10
	1	Toluene				ND	ND	ND	ND	ND
		TCE				650	470	410	460	320
	1	Vinyl Chloride			I	82	22	58	68	53

⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

Bold number show concentrations that exceeded 50 percent of the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (7,800 ppbv); benzene (50 ppbv); ethylbenzene (12,250 ppbv); m- & p-xylenes (3,570 ppbv);

methane (6,250 ppmv); PCE (266 ppbv); TCE (205.5 ppbv); toluene (5,300 ppbv) and vinyl chloride (6.25 ppbv).



ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

SUMMARY OF TREND DATA FOR SELECTED SOIL GAS WELLS FOR ACETONE. BENZENE, ETHYLBENZENE,

M- & P-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE WASTE DISPOSAL, INC. SUPERFUND SITE

									P.	age 6 of 6
SAMPLE	LOCATION	COMPTITUTION		19	98			19	199	
NUMBER	200111011	CONSTITUENTS''	IstQ	2ndQ	3rdQ	4thQ	1stQ	2ndQ	3rdQ	4thQ
		Acetone				4.5	4.6	12	7.7	ND
	İ	Benzene				0.85	ND	ND	ND	ND
		Ethylhenzene				ND	ND	ND	ND	ND
	12741 Los Nietos Rd in	m- & p-Xylene				0.76	ND	ND	1.7	ND
VW-58-08	Area 8 located off the west	Methane				1.30	0.89	0.88	1.0	1.2
	back corner of the building	PCE				26	13	15	34	18
		Toluene				1.10	ND	ND	ND	ND
		TCE				3,200	2,200	2,200	4,400	3,200
		Vinyl Chloride				ND	ND	ND	ND	ND
		Acetone				6.6	1.5	12	6.0	ND
		Benzene				3.7	1.0	0.84	0.88	ND
		Ethylbenzene				ND	ND	ND	ND	ND
	12741 Los Nietos Rd in	m- & p-Xylene				4.1	ND	ND	1.7	ND
VW-58-19	Area 8 located off the west	Methane				ND	0.78	1.2	ND	ND
	back corner of the building	PCE				210.0	120	140	150	170
		Toluene				3.7	0.69	ND	2.1	ND
		TCE				5,400	3,700	4,300	4,400	4,700
		Vinyl Chloride				ND	ND.	ND	ND	ND
		Acetone				8	47	6.0	5.7	ND
	1	Benzene				ND	0.98	2.1	ND	ND
		Ethylbenzene				ND	ND	2.2	ND	ND
	12741 Los Nietos Rd in	m- & p-Xylene				ND	ND	9.8	ND	ND
VW-58-29	Area 8 located off the west	Methane				0.53	0.99	0.65	ND	0.81
	back corner of the building	PCE				190	100	120	200	150
	1	Toluene		L		ND	ND	13	1.7	ND
		TCE				4,100	2,800	2,500	2,700	2,800
		Vinyl Chloride				ND	ND	ND	ND	ND

94-256 ReDelnSuRe Rev 2 0 (5 4 01 rsc)



⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

ND = Concentration of the constituent was not detected above the laboratory's reporting limit. Bold number show concentrations that exceeded 50 percent of the Soil Gas Interim Threshold Screening Levels (ITSLs). ITSLs: acetone (7,800 ppbv); benzene (50 ppbv); ethylbenzene (12,250 ppbv); m- & p-xylenes (3,570 ppbv); methane (6,250 ppmv); PCE (266 ppbv); TCE (205.5 ppbv); toluene (5,300 ppbv) and vinyl chloride (6.25 ppbv).

CHEMICALS OF CONCERN WHICH EXCEEDED SOIL GAS INTERIM THRESHOLD LIMITS 1998 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

								Page 1 of 2
AREA	VAPOR WELL NO.	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
1	VW-44	Deep	Interior	N	Feb-98	Vinyl Chloride	25 ppb	50 ppb
	ļ]			Apr-98	Vinyl Chloride	25 ppb	47 ppb
	1				Jul-98	Vinyl Chloride	25 ppb	59 ppb
2	VW-45	Shallow	Interior	F	Jul-98	Methane	12,500 ppm	12,500 ppm
İ	ľ				Oct-98	Methane	12,500 ppm	12,500 ppm
	}				Jul-98	Vinyl Chloride	25 ppb	25 ppb
					Oct-98	Vinyl Chloride	25 ppb	25 ppb
					Oct-98	t-1,2 DCE	3,680 ppb	3,680 ppb
	ŀ				Oct-98	c-1,2 DCE	1,860 ppb	1,860 ppb
					Oct-98	Benzene	200 ppb	200 ppb
					Oct-98	Toluene	21,200 ppb	21,200 ppb
} ,	ļ				Oct-98	m & p-Xylene	14,280 ppb	14,280 ppb
	VW-48	Shallow	Interior	F	Feb-98	Methane	12,500 ppm	365,000 ppm
	1				Jul-98	Methane	12,500 ppm	258,000 ppm
					Oct-98	Methane	12,500 ppm	155,000 ppm
					Feb-98	Vinyl chloride	25 ppb	480 ppb
	1				Jul-98	Vinyl chloride	25 ppb	750 ppb
					Oct-98	Vinyl chloride	25 ppb	490 ppb
					Feb-98	Benzene	200 ppb	2,200 ppb
					Jul-98	Benzene	200 ppb	820 ppb
					Oct-98	Benzene	200 ppb	1,300 ppb
	VW-43	Intermediate	Interior	S	Apr-98	Methane	12,500 ppm	15,100 ppm
					Jul-98	Methane	12,500 ppm	22,000 ppm
					Oct-98	Methane	12,500 ppm	18,100 ppm
					Feb-98	Vinyl Chloride	25 ppb	120 ppb
					Apr-98	Vinyl Chloride	25 ppb	430 ppb
		1			Jul-98	Vinyl Chloride	25 ppb	240 ppb
					Oct-98	Vinyl Chloride	25 ppb	430 ppb
	VW-45	Intermediate	Interior	S	Feb-98	Methane	12,500 ppm	61,000 ppm
					Apr-98	Methane	12,500 ppm	63,100 ppm
					Jul-98	Methane	12,500 ppm	90,200 ppm
			}		Oct-98	Methane	12,500 ppm	101,000 ppm
			ļ		Feb-98	Vinyl Chloride	25 ppb	380 ppb
					Apr-98	Vinyl Chloride	25 ppb	6,500 ppb
					Jul-98	Vinyl Chloride	25 ppb	87 ppb
					Oct-98	Vinyl Chloride	25 ppb	38,000 ppb
					Арг-98	t-1,2 DCE	3,680 ppb	4,700 ppb
					Арг-98	c-1,2 DCE	1,860 ppb	8,000 ppb
					Feb-98	Benzene	200 ppb	570 ppb
			ļ		Арг-98	Benzene	200 ppb	2,800 ppb
					Oct-98	Benzene	200 ppb	1,800 ppb

(1) Material Types: F = Fill Material

S = Sump Material

ppm = parts per million ppb = parts per billion RI = Remedial Investigation Well

N = Native Material
A = All Material

71 7111 Material

CHEMICALS OF CONCERN WHICH EXCEEDED SOIL GAS INTERIM THRESHOLD LIMITS 1998 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 2

						,		Page 2 of 2
AREA	VAPOR WELL NO.	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
2	VW-48	Intermediate	Interior	S	Feb-98	Methane	12,500 ppm	539,000 ppm
			,		Apr-98	Methane	12,500 ppm	441,000 ppm
					Jul-98	Methane	12,500 ppm	592,000 ppm
		l			Oct-98	Methane	12,500 ppm	517,000 ppm
		i			Feb-98	Benzene	200 ppb	6,700 ppb
			<u> </u>		Apr-98	Benzene	200 ppb	4,100 ppb
					Jul-98	Benzene	200 ppb	4,200 ppb
		ļ]		Oct-98	Benzene	200 ppb	4,200 ppb
	VW-02	RI	Interior	A	Feb-98	Methane	12,500 ppm	33,000 ppm
	VW-03	RI	Interior	A	Feb-98	Methane	12,500 ppm	14,000 ppm
					Apr-98	Methane	12,500 ppm	16,200 ppm
i	VW-04	RI	Interior	A	Feb-98	Methane	12,500 ppm	130,000 ppm
			1	••	Apr-98	Methane	12,500 ppm	190,000 ppm
		j			Jul-98	Methane	12,500 ppm	173,000 ppm
					Oct-98	Methane	12,500 ppm	101,000 ppm
					Apr-98	Vinyl Chloride	25 ppb	280 ppb
i					Oct-98	Vinyl Chloride	25 ppb	82 ppb
					Feb-98	Benzene	200 ppb	830 ppb
			İ		l			
1					Apr-98	Benzene	200 ppb	1,100 ppb
					Jul-98	Benzene	200 ppb	890 ppb
	1/11/ 42				Oct-98	Benzene	200 ppb	450 ppb
	VW-43	Deep	Interior	N	Feb-98	Methane	12,500 ppm	24,000 ppm
					Apr-98	Methane	12,500 ppm	20,500 ppm
			[Jul-98	Methane	12,500 ppm	23,000 ppm
			i i		Oct-98	Methane	12,500 ppm	14,100 ppm
					Feb-98	Vinyl Chloride	25 ppb	220 ppb
					Apr-98	Vinyl Chloride	25 ppb	230 ppb
					Jul-98	Vinyl Chloride	25 ppb	280 ppb
					Oct-98	Vinyl Chloride	25 ppb	530 ppb
	VW-45	Deep	Interior	N	Feb-98	Methane	12,500 ppm	32,000 ppm
					Apr-98	Methane	12,500 ppm	14,300 ppm
- 1					Jul-98	Methane	12,500 ppm	27,800 ppm
J					Oct-98	Vinyl Chloride	25 ppb	99 ppb
[Feb-98	Benzene	200 ppb	380 ppb
	VW-48	Deep	Interior	N	Feb-98	Methane	12,500 ppm	37,000 ppm
l					Apr-98	Methane	12,500 ppm	31,600 ppm
					Jul-98	Methane	12,500 ppm	27,500 ppm
					Oct-98	Methane	12,500 ppm	16,600 ppm
4	VW-06	RI	Interior	A	Feb-98	Methane	12,500 ppm	53,000 ppm
					Feb-98	Vinyl Chloride	25 ppb	55 ppb
7	VW-25	RI	Interior	A	Feb-98	Methane	12,500 ppm	507,000 ppm
1			ļ	1	Apr-98	Methane	12,500 ppm	334,000 ppm
					Jul-98	Methane	12,500 ppm	65,000 ppm
					Oct-98	Methane	12,500 ppm	155,000 ppm
8	VW-14	RI	Interior	A	Feb-98	Vinyl Chloride	25 ppb	370 ppb
					Apr-98	Vinyl Chloride	25 ppb	350 ppb
					Oct-98	1,2-Dichloropropane	186 ppb	370 ppb
	VW-52	Deep	Interior	N	Oct-98	1,2-Dichloropropane	186 ppb	510 ppb
							FF-	94-256 Rpts/ReDeInSuRe Rev. 2 (5/4/01/rw

(1) Material Types: F = Fill Material

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N = Native Material

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ppm = parts per million ppb = parts per billion

RI = Remedial Investigation Well

CHEMICALS OF CONCERN WHICH EXCEED SOIL GAS INTERIM THRESHOLD LIMITS 1999 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

AREA	VAPOR WELL	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
2	VW-48	Shallow	Interior	F	Feb-99	Methane	12,500 ppm	208,000 ppm
	1			_	Aug-99	Methane	12,500 ppm	184,000 ppm
	Ĭ				Feb-99	Benzene	200 ppb	810 ppb
					Apr-99	Benzene	200 ppb	880 ppb
			}		Aug-99	Benzene	200 ppb	680 ppb
]	•		Feb-99	Vinyl Chloride	25 ppb	450 ppb
	ľ				Apr-99	Vinyl Chloride	25 ppb	420 ppb
	1				Aug-99	Vinyl Chloride	25 ppb	510 ppb
	VW-43	Intermediate	Interior	S	Feb-99	Methane	12,500 ppm	16,100 ppm
					Apr-99	Methane	12,500 ppm	21,000 ppb
					Aug-99	Methane	12,500 ppm	22,000 ppb
					Feb-99	Vinyl Chloride	25 ppb	490 ppb
	1				Apr-99	Vinyl Chloride	25 ppb	670 ppb
	1				Aug-99	Vinyl Chloride	25 ppb	470 ppb
	VW-48	Intermediate	Interior	S	Feb-99	Methane	12,500 ppm	356,000 ppm
					Aug-99	Methane	12,500 ppm	530,000 ppm
	ł				Feb-99	Benzene	200 ppb	2,900 ppb
	1		1		Apr-99	Benzene	200 ppb	7,100 ppb
					Aug-99	Benzene	200 ppb	3,500 ppb
	VW-04	RI	Interior	Α	Aug-99	Methane	12,500 ppm	78,900 ppm
	İ				Feb-99	Benzene	200 ppb	230 ppb
					Apr-99	Benzene	200 ppb	270 ppb
					Aug-99	Benzene	200 ppb	350 ppb
					Aug-99	Vinyl Chloride	25 ppb	64 ppb
	VW-43	Deep	Interior	N	Apr-99	Methane	12,500 ppm	16,000 ppm
		_			Aug-99	Methane	12,500 ppm	16,300 ppm
					Feb-99	Vinyl Chloride	25 ppb	390 ppb
					Apr-99	Vinyl Chloride	25 ppb	440 ppb
					Aug-99	Vinyl Chloride	25 ppb	300 ppb
	VW-48	Deep	Interior	N	Feb-99	Methane	12,500 ppm	13,500 ppm
					Aug-99	Methane	12,500 ppm	19,600 ppm
8	VW-52	Intermediate	Interior	N	Feb-99	1,2-Dichloropropane	186 ppb	190 ppb
	VW-14	RI	Interior	A	Feb-99	1,2-Dichloropropane	186 ppb	190 ppb
	1				Apr-99	Vinyl Chloride	25 ppb	37 ppb
					Aug-99	Vinyl Chloride	25 ppb	66 ppb
	VW-52	Deep	Interior	N	Feb-99	1,2-Dichloropropane	186 ppb	250 ppb
					Apr-99	1,2-Dichloropropane	186 ppb	220 ppb 94-256/Rpts/RD (Rev. 20) (5/4/01/rw)

(1) Material Types:

F = Fill Material S = Sump Material

ppm = parts per million ppb = parts per billion

N = Native Material

A = All Material

RI = Remedial Investigation Well

CHEMICALS OF CONCERN WHICH EXCEEDED SITE BOUNDARY INTERIM THRESHOLD LIMITS 1998 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

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AREA	VAPOR WELL NO.	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
1	VW-40	Shallow	Perimeter	F	Apr-98	Methane	12,500 ppm	15,000 ppm
:					Jul-98	Methane	12,500 ppm	18,300 ppm
	VW-46	Shallow	Perimeter	F	Jul-98	Methane	12,500 ppm	17,200 ppm
					Oct-98	Methane	12,500 ppm	46,500 ppm
	VW-62	Shallow	Perimeter	F	Oct-98	Methane	12,500 ppm	28,600 ppm
	VW-62	Intermediate	Perimeter	s	Oct-98	Vinyl chloride	12.5 ppb	l 4 ppb
	VW-10	R!	Perimeter	Α	Feb-98	Vinyl chloride	12.5 ppb	150 ppb
					Арг-98	Vinyl chloride	12.5 ppb	120 ppb
					Jul-98	Vinyl chloride	12.5 ppb	160 ppb
	VW-H	RI	Perimeter	Α	Feb-98	Methane	12,500 ppm	18,000 ppm
					Apr-98	Methane	12,500 ppm	15,000 ppm
					Jul-98	Methane	12,500 ppm	15,100 ppm
	VW-18	RI	Perimeter	Α	Feb-98	Benzene	100 ppb	1,600 ppb
					Apr-98	Benzene	100 ppb	420 ppb
					Jul-98	Benzene	100 ppb	110 ppb
					Oct-98	Benzene	100 ppb	740 ppb
	VW-35	Deep	Perimeter	N	Feb-98	TCE	411 ppb	1,600 ppb
					Арг-98	TCE	411 ppb	1,500 ppb
					Jul-98	TCE	411 ppb	1,200 ppb
					Oct-98	TCE	411 ppb	1,700 ppb
5	VW-51	Intermediate	Perimeter	S	Feb-98	Methane	12,500 ppm	386,000 ppm
i					Apr-98	Methane	12,500 ppm	234,000 ppm
					Jul-98	Methane	12,500 ppm	241,000 ppm
					Oct-98	Methane	12,500 ppm	328,000 ppm
					Арг-98	Benzene	100 ppb	1,200 ppb
					Jul-98	Benzene	100 ppb	2,900 ppb
					Oct-98	Benzene	100 ppb	6,500 ppb
	MP-1	Intermediate	Perimeter	S	Apr-98	Methane	12,500 ppm	73,700 ppm
					Jul-98	Methane	12,500 ppm	680,000 ppm
					Oct-98	Methane	12,500 ppm	851,000 ppm
					Apr-98	Benzene	100 ppb	120 ppb
					Jul-98	Benzene	100 ppb	410 ppb
	MP-2	Intermediate	Perimeter	S	Jul-98	Methane	12,500 ppm	743,000 ppm
					Apr-98	Methane	12,500 ppm	644,000 ppm
					Oct-98	Methane	12,500 ppm	840,000 ppm
1			•		Apr-98	Benzene	100 ppb	60,000 ppb
					Jul-98	Benzene	100 ppb	20,000 ppb
					Oct-98	Benzene	100 ppb	1,300 ppb
	VW-30	Deep	Perimeter	N	Apr-98	Methane	12,500 ppm	13,000 ppm
	VW-51	Deep	Perimeter	N	Feb-98	Methane	12,500 ppm	41,000 ppm
}					Apr-98	Methane	12,500 ppm	38,100 ppm
Į					Oct-98	Methane	12,500 ppm	13,300 ppm
İ					Feb-98	Vinyl Chloride	12.5 ppb	82 ppb
			İ		Apr-98	Vinyl Chloride	12.5 ppb	65 ppb
,					Oct-98	Vinyl Chloride	12.5 ppb	14 ppb
ļ	;		}		Feb-98	Benzene	100 ppb	310 ppb
					Jul-98	PCE	532 ppb	1,400 ppb

(1) Material Types: F = Fill Material

S = Sump Material N = Native Material

A = All Material

ppm = parts per million ppb = parts per billion

RI = Remedial Investigation Well



CHEMICALS OF CONCERN WHICH EXCEEDED SITE BOUNDARY INTERIM THRESHOLD LIMITS 1998 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 2 of 2

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AREA	VAPOR WELL NO.	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
8	VW-53	Shallow	Perimeter	F	Jul-98	Vinyl Chloride	12.5 ppb	14 ppb
	VW-55	Shallow	Perimeter	F	Oct-98	Methane	12,500 ppm	119,000 ppm
	VW-56	Shallow	Perimeter	F	Oct-98	Vinyl Chloride	12.5 ppb	18 ppb
	VW-58	Shallow	Perimeter	F	Oct-98	TCE	411 ppb	3,200 ppb
	VW-49	Intermediate	Perimeter	S	Feb-98	PCE	532 ppb	730 ppb
					Oct-98	PCE	532 ppb	540 ppb
	VW-53	Intermediate	Perimeter	S	Jul-98	TCE	411 ppb	1,000 ppb
					Jul-98	Vinyl Chloride	12.5 ppb	21 ppb
	VW-55	Intermediate	Perimeter	S	Oct-98	TCE	411 ppb	740 ppb
					Oct-98	Vinyl Chloride	12.5 ppb	87 ppb
	VW-56	Intermediate	Perimeter	S	Oct-98	TCE	411 ppb	670 ppb
	VW-57	Intermediate	Perimeter	S	Oct-98	TCE	411 ppb	660 ppb
	VW-58	Intermediate	Perimeter	S	Oct-98	TCE	411 ppb	5,400 ppb
	VW-61	Intermediate	Perimeter	S	Oct-98	Vinyl Chloride	12.5 ppb	55 ppb
	VW-13	RI	Perimeter	Α	Feb-98	Methane	12,500 ppm	13,000 ppm
					Арт-98	Methane	12,500 ppm	13,400 ppm
					Oct-98	Methane	12,500 ppm	13,800 ppm
					Feb-98	Vinyl Chloride	12.5 ppb	29 ppb
					Apr-98	Vinyl Chloride	12.5 ppb	46 ppb
					Jul-98	Vinyl Chloride	12.5 ppb	37 ppb
					Oct-98	Vinyl Chloride	12.5 ppb	56 ppb
	VW-21	RI	Perimeter	Α	Feb-98	TCE	411 ppb	420 ppb
	VW-22	RI	Perimeter	Α	Feb-98	TCE	411 ppb	1,400 ppb
					Apr-98	TCE	411 ppb	3,200 ppb
					Jul-98	TCE	411 ppb	850 ppb
					Oct-98	TCE	411 ppb	2,000 ppb
	VW-23	RI	Perimeter	Α	Feb-98	Vinyl Chloride	12.5 ppb	35 ppb
					Apr-98	Vinyl Chloride	12.5 ppb	40 ppb
					Jul-98	Vinyl Chloride	12.5 ppb	26 ppb
					Feb-98	TCE	411 ppb	910 ppb
					Apr-98	TCE	411 ppb	850 ppb
					Jul-98	TCE	411 ppb	690 ppb
Î					Oct-98	TCE	411 ppb	510 ppb
	VW-33	Deep	Perimeter	N	Feb-98	TCE	411 ppb	420 ppb
	VW-49	Deep	Perimeter	N	Feb-98	PCE	532 ppb	900 ppb
					Apr-98	PCE	532 ppb	930 ppb
	VW-53	Deep	Perimeter	N	Jul-98	TCE	411 ppb	790 ppb
					Oct-98	TCE	411 ppb	840 ppb
	VW-55	Deep	Perimeter	N	Oct-98	Vinyl Chloride	12.5 ppb	82 ppb
					Oct-98	TCE	411 ppb	650 ppb
	VW-56	Deep	Perimeter	N	Oct-98	TCE	411 ppb	710 ppb
	VW-57	Deep	Perimeter	N	Oct-98	TCE	411 ppb	890 ppb
	VW-58	Deep	Perimeter	N	Oct-98	TCE	411 ppb	4,100 ppb 56 Reports/ReDeInSuRe Rev. 2 (5/4/01/rw)

ppm = parts per million ppb = parts per billion

RI = Remedial Investigation Well

(1) Material Types: F = Fill Material

S = Sump Material

N = Native Material

CHEMICALS OF CONCERN WHICH EXCEED SITE BOUNDARY INTERIM THRESHOLD LIMITS 1999 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

								Page 1 of 5
AREA	VAPOR WELL	WELL TYPE	WELL LOCATION	MATERIAL TYPE (I)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
1	VW-46	Shallow	Perimeter	F	Aug-99	Methane	12,500 ppm	15,900 ppm
					Nov-99	Methane	12,500 ppm	32,200 ppm
	VW-62	Shallow	Perimeter	F	Feb-99	Methane	12,500 ppm	39,000 ppm
					Apr-99	Methane	12,500 ppm	35,800 ppm
					Aug-99	Methane	12,500 ppm	57,000 ppm
					Nov-99	Methane	12,500 ppm	56,200 ppm
	VW-18	RI	Perimeter	Α	Feb-99	Benzene	100 ppb	430 ppb
					Aug-99	Benzene	100 ppb	570 ppb
	VW-35	Deep	Perimeter	N	Feb-99	TCE	411 ppb	1,300 ppb
					Apr-99	TCE	411 ppb	1,200 ppb
	j				Aug-99	TCE	411 ppb	850 ppb
					Nov-99	TCE	411 ppb	730 ppb
2	VW-45	Shallow	Perimeter	F	Feb-99	Methane	12,500 ppm	173,000 ppm
					Apr-99	Methane	12,500 ppm	174,000 ppb
					Aug-99	Methane	12,500 ppm	176,000 ppb
					Nov-99	Methane	12,500 ppm	168,000 ppb
				İ	Feb-99	Benzene	100 ppb	9,500 ppb
					Apr-99	Benzene	100 ppb	23,000 ppb
	Ì]		Aug-99	Benzene	100 ppb	28,000 ppb
					Nov-99	Benzene	100 ppb	45,000 ppb
					Nov-99	cis-1,2-Dichloroethene	930 ppb	1,100 ppb
					Арг-99	m- & p-Xylenes	7,140 ppb	18,000 ppb
			1	l	Aug-99	m- & p-Xylenes	7,140 ppb	23,000 ppb
					Nov-99	m- & p-Xylenes	7,140 ppb	32,000 ppb
					Nov-99	o-Xylene	7,140 ppb	9,900 ppb
					Apr-99	Toluene	10,600 ppb	20,000 ppb
					Aug-99	Toluene	10,600 ppb	21,000 ppb
					Nov-99	Toluene	10,600 ppb	24,000 ppb
					Apr-99	trans-1,2-Dichloroethene	1,840 ppb	4,300 ppb
			[Aug-99	trans-1,2-Dichloroethene	1,840 ppb	2,600 ppb
					Nov-99	trans-1,2-Dichloroethene	1,840 ppb	1,900 ppb
					Feb-99	Vinyl Chloride	12.5 ppb	31,000 ppb
					Apr-99	Vinyl Chloride	12.5 ppb	75,000 ppb
]		Aug-99	Vinyl Chloride	12.5 ppb	70,000 ppb
					Dec-99	Vinyl Chloride	12.5 ppb	66,000 ppb

(1) Material Types:

F = Fill Material

ppm = parts per million

ppb = parts per billion

RI = Remedial Investigation Well

S = Sump Material

N = Native Material

CHEMICALS OF CONCERN WHICH EXCEED SITE BOUNDARY INTERIM THRESHOLD LIMITS 1999 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 2 of 5

								Page 2 of 5
AREA	VAPOR WELL	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
2	VW-45	Intermediate	Interior	S	Feb-99	Methane	12,500 ppm	97,000 ppm
(Continued)		i i			Apr-99	Methane	12,500 ppm	120,000 ppb
1					Aug-99	Methane	12,500 ppm	12,800 ppb
					Nov-99	Methane	12,500 ppm	168,000 ppb
]					Feb-99	Benzene	100 ppb	7,200 ppb
ł		}			Apr-99	Benzene	100 ppb	7,300 ppb
		1			Aug-99	Benzene	100 ppb	2,200 ppb
1					Nov-99	Benzene	100 ppb	3,600 ppb
}					Feb-99	m- & p-Xylenes	7,140 ppb	9,600 ppb
1					Apr-99	m- & p-Xylenes	7,140 ppb	13,000 ppb
					Aug-99	m- & p-Xylenes	7,140 ppb	7,600 ppb
					Nov-99	m- & p-Xylenes	7,140 ppb	8,200 ppb
					Apr-99	o-Xylene	7,140 ppb	7,200 ppb
J J]			Feb-99	Toluene	10,600 ppb	13,000 ppb
					Арг-99	Toluene	10,600 ppb	12,000 ppb
1 1					Арг-99	trans-1,2-Dichloroethene	1,840 ppb	2,300 ppb
					Feb-99	Vinyl Chloride	12.5 ppb	16,000 ppb
					Арг-99	Vinyl Chloride	12.5 ppb	27,000 ppb
1 1					Aug-99	Vinyl Chloride	12.5 ppb	17,000 ppb
					Dec-99	Vinyl Chloride	12.5 ppb	17,000 ppb
	VW-45	Deep	Interior	N	Feb-99	Methane	12,500 ppm	18,000 ppb
					Apr-99	Methane	12,500 ppm	17,000 ppb
1 1		1			Aug-99	Methane	12,500 ppm	18,000 ppb
					Nov-99	Methane	12,500 ppm	17,800 ppb
					Feb-99	Vinyl Chloride	12.5 ppb	73 ppb
1					Apr-99	Vinyl Chloride	12.5 ppb	62 ppb
1 1]			Aug-99	Vinyl Chloride	12.5 ppb	47 ppb
					Nov-99	Vinyl Chloride	12.5 ppb	52 ppb
5	VW-51	Intermediate	Perimeter	s	Feb-99	Methane	12,500 ppm	90,100 ppm
					Apr-99	Methane	12,500 ppm	420,000 ppm
]]]			Aug-99	Methane	12,500 ppm	390,000 ppm
1					Nov-99	Methane	12,500 ppm	239,000 ppm
1 1					Feb-99	Benzene	100 ppb	3,100 ppb
j					Apr-99	Benzene	100 ppb	12,000 ppb
					Aug-99	Benzene	100 ppb	13,000 ppb
					Nov-99	Benzene	100 ppb	5,400 ppb

(1) MaterialTypes:

F = Fill Material

ppm = parts per million ppb = parts per billion RI = Remedial Investigation Well

S = Sump Material
N = Native Material

CHEMICALS OF CONCERN WHICH EXCEED SITE BOUNDARY INTERIM THRESHOLD LIMITS 1999 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

								Page 3 of 5
AREA	VAPOR WELL	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
5	MP-1	Intermediate	Perimeter	S	Feb-99	Methane	12,500 ppm	947,000 ppm
(Continued)		1			Apr-99	Methane	12,500 ppm	910,000 ppm
					Aug-99	Methane	12,500 ppm	778,000 ppm
					Nov-99	Methane	12,500 ppm	923,000 ppm
	MP-2	Intermediate	Perimeter	S	Feb-99	Methane	12,500 ppm	825,000 ppm
					Apr-99	Methane	12,500 ppm	840,000 ppm
					Aug-99	Methane	12,500 ppm	837,000 ppm
					Nov-99	Methane	12,500 ppm	850,000 ppm
	VW-51	Deep	Perimeter	N	Feb-99	Methane	12,500 ppm	18,900 ppm
					Apr-99	Methane	12,500 ppm	22,000 ppm
					Aug-99	Methane	12,500 ppm	23,400 ppm
					Nov-99	Methane	12,500 ppm	23,800 ppm
					Feb-99	PCE	532 ppb	570 ppb
					Feb-99	TCE	411 ppb	1,000 ppb
		1 1			Apr-99	TCE	411 ppb	550 ppb
					Aug-99	TCE	411 ppb	500 ppb
					Nov-99	TCE	411 ppb	540 ppb
					Feb-99	Vinyl Chloride	12.5 ppb	69 ppb
					Apr-99	Vinyl Chloride	12.5 ppb	37 ppb
					Nov-99	Vinyl Chloride	12.5 ppb	50 ppb
7	VW-25	RI	Perimeter	A	Feb-99	Methane	12,500 ppm	145,000 ppm
					Apr-99	Methane	12,500 ppm	120,000 ppm
		1			Aug-99	Methane	12,500 ppm	151,000 ppm
8	VW-53	Shallow	Perimeter	F	Aug-99	Methane	12,500 ppm	13,700 ppm
		<u> </u>			Aug-99	Vinyl Chloride	12.5 ppb	23 ppb
	VW-55	Shallow	Perimeter	F	Aug-99	Methane	12,500 ppm	115,000 ppm
					Nov-99	Methane	12,500 ppm	74,700 ppm
	VW-56	Shallow	Perimeter	F	Aug-99	Vinyl Chloride	12.5 ppb	17 ppb
1					Nov-99	Vinyl Chloride	12.5 ppb	15 ppb
	VW-58	Shallow	Perimeter	F	Feb-99	TCE	411 ppb	2,000 ppb
					Apr-99	TCE	411 ppb	2,200 ppb
			-		Aug-99	TCE	411 ppb	4,400 ppb
					Nov-99	TCE	411 ppb	3,200 ppb
[VW-49	Intermediate	Perimeter	S	Арг-99	PCE	532 ppb	540 ppb
					Nov-99	PCE	532 ppb	540 ppb

(1) Material Types:

F = Fill Material

ppm = parts per million ppb = parts per billion

RI = Remedial Investigation Well

S = Sump Material

N = Native Material

CHEMICALS OF CONCERN WHICH EXCEED SITE BOUNDARY INTERIM THRESHOLD LIMITS 1999 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 4 of 5

								Page 4 of 5
AREA	VAPOR WELL	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
8	VW-53	Intermediate	Perimeter	S	Feb-99	TCE	411 ppb	550 ppb
(Continued)					Apr-99	TCE	411 ppb	510 ppb
]` []		J j			Aug-99	TCE	411 ppb	440 ppb
					Nov-99	TCE	411 ppb	560 ppb
	VW-55	Intermediate	Perimeter	S	Feb-99	Methane	12,500 ppm	13,000 ppm
1					Feb-99	TCE	411 ppb	450 ppb
					Apr-99	TCE	411 ppb	740 ppb
					Aug-99	TCE	411 ppb	520 ppb
					Feb-99	Vinyl Chloride	12.5 ppb	73 ppb
					Apr-99	Vinyl Chloride	12.5 ppb	110 ppb
					Aug-99	Vinyl Chloride	12.5 ppb	65 ppb
[Nov-99	Vinyl Chloride	12.5 ppb	50 ppb
1 1	VW-56	Intermediate	Perimeter	S	Feb-99	TCE	411 ppb	550 ppb
1 1					Apr-99	TCE	411 ppb	470 ppb
]					Aug-99	TCE	411 ppb	470 ppb
] [Nov-99	TCE	411 ppb	440 ppb
1	VW-57	Intermediate	Perimeter	S	Feb-99	TCE	411 ppb	740 ppb
l L		<u> </u> i			Арг-99	TCE	411 ppb	560 ppb
1	VW-58	Intermediate	Perimeter	S	Feb-99	TCE	411 ppb	3,700 ppb
1		1			Apr-99	TCE	411 ppb	4,500 ppb
1					Aug-99	TCE	411 ppb	4,400 ppb
1 1					Nov-99	TCE	411 ppb	4,700 ppb
	VW-61	Intermediate	Perimeter	S	Feb-99	Vinyl Chloride	12.5 ppb	38 ppb
1					Apr-99	Vinyl Chloride	12.5 ppb	28 ppb
1					Aug-99	Vinyl Chloride	12.5 ppb	15 ppb
l [Nov-99	Vinyl Chloride	12.5 ppb	25 ppb
1	VW-13	RI	Perimeter	Α	Feb-99	Methane	12,500 ppm	14,000 ppm
		†			Feb-99	Vinyl Chloride	12.5 ppb	36 ppb
					Apr-99	Vinyl Chloride	12.5 ppb	40 ppb
! [Aug-99	Vinyl Chloride	Jan-04	20 ppb
]	VW-22	RI	Perimeter	Α	Feb-99	TCE	411 ppb	1,800 ppb
ļ l					Apr-99	TCE	411 ppb	1,700 ppb
]			Aug-99	TCE	411 ppb	1,800 ppb
		<u> </u>			Nov-99	TCE	411 ppb	1,500 ppb

(1) Material Types:

F = Fill Material

ppm = parts per million

RI = Remedial Investigation Well

S = Sump Material

ppb = parts per billion

N = Native Material A = All Material

CHEMICALS OF CONCERN WHICH EXCEED SITE BOUNDARY INTERIM THRESHOLD LIMITS 1999 VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 5 of 5

								Page 5 of 5
AREA	VAPOR WELL	WELL TYPE	WELL LOCATION	MATERIAL TYPE (1)	DATE OF SAMPLE	CONSTITUENT	THRESHOLD LIMIT	CONCENTRATION
8	VW-23	RI	Perimeter	Α	Feb-99	TCE	411 ppb	890 ppb
(Continued)					Apr-99	TCE	411 ppb	780 ppb
					Aug-99	TCE	411 ppb	650 ppb
					Apr-99	Vinyl Chloride	12.5 ppb	18 ppb
			ļ		Aug-99	Vinyl Chloride	12.5 ppb	17 ppb
	VW-49	Deep	Perimeter	N	Apr-99	PCE	532 ppb	550 ppb
Ţ	VW-53	Deep	Perimeter	N	Feb-99	TCE	411 ppb	670 ppb
		-			Apr-99	TCE	411 ppb	580 ppb
					Aug-99	TCE	411 ppb	490 ppb
					Nov-99	TCE	411 ppb	490 ppb
	VW-55	Deep	Perimeter	N	Feb-99	TCE	411 ppb	470 ppb
		_			Aug-99	TCE	411 ppb	460 ppb
					Feb-99	Vinyl Chloride	12.5 ppb	22 ppb
					Apr-99	Vinyl Chloride	12.5 ppb	58 ppb
					Aug-99	Vinyl Chloride	12.5 ppb	68 ppb
					Nov-99	Vinyl Chloride	12.5 ppb	53 ppb
Γ	VW-56	Deep	Perimeter	N	Feb-99	TCE	411 ppb	590 ppb
					Apr-99	TCE	411 ppb	480 ppb
					Aug-99	TCE	411 ppb	430 ppb
					Nov-99	TCE	411 ppb	470 ppb
	VW-57	Deep	Perimeter	N	Feb-99	TCE	411 ppb	1,100 ppb
					Apr-99	TCE	411 ppb	700 ppb
					Aug-99	TCE	411 ppb	430 ppb
					Nov-99	TCE	411 ppb	420 ppb
	VW-58	Deep	Perimeter	N	Feb-99	TCE	411 ppb	2,800 ppb
					Apr-99	TCE	411 ppb	2,500 ppb
ľ					Aug-99	TCE	411 ppb	2,700 ppb
					Nov-99	TCE	411 ppb	2,800 ppb 94-256/Rpts/RD Rev. 2.0 (5/3/01/jb)

(1) Material Types:

F = Fill Material

ppm = parts per million ppb = parts per billion

RI = Remedial Investigation Well

S = Sump Material

N = Native Material

TABLE 4.18B CRITICAL WELLS IN AREA 1 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING

WASTE DISPOSAL, INC. SUPERFUND SITE

AREA	WELL INDENTIFICATION	DATE OF SAMPLE	CONSTITUENT			
		1st Qtr 98				
	VW10-35	2nd Qtr 98	Vinyl Chloride			
		3rd Qtr 98				
		1st Qtr 98				
	VW11-35	2nd Qtr 98	Methane			
		3rd Qtr 98				
		1st Qtr 98	·			
		2nd Qtr 98				
	1,111,110,00	3rd Qtr 98				
	VW18-36	4th Qtr 98	Benzene			
		1st Qtr 99				
		3rd Qtr 99	1			
		1st Qtr 98				
		2nd Qtr 98				
		3rd Qtr 98				
	1/19/25 20	4th Qtr 98	T : 11			
	VW35-38	1st Qtr 99	Trichloroethene			
1		2nd Qtr 99				
•		3rd Qtr 99				
		4th Qtr 99				
	V/W/40-10	2nd Qtr 98	Mathana			
	VW40-10	3rd Qtr 98	Methane			
		1st Qtr 98				
	VW44-30	2nd Qtr 98	Vinyl Chloride			
		3rd Qtr 98	_			
		3rd Qtr 98				
	VW46-07	4th Qtr 98	Methane			
	V W 40-07	3rd Qtr 99	Methane			
		4th Qtr 99	_			
		4th Qtr 98				
		1st Qtr 99				
	VW62-08	2nd Qtr 99	Methane			
	[3rd Qtr 99				
		4th Qtr 99				
	VW62-18	4th Qtr 98	Vinyl Chloride			
	VW62-29	4th Qtr 98	Vinyl Chloride			

94-256 Rpts/RD Rev. 2.0 (5.3/01/ks)



TABLE 4.18C CRITICAL WELLS IN AREA 2 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 5

			Page 1 of 5		
AREA	WELL	DATE OF	CONCTITUENT		
AKEA	INDENTIFICATION	SAMPLE	CONSTITUENT		
	VW02-35	1st Qtr 98	Methane		
	VW03-35	1st Qtr 98	Methane		
	V W 05-35	2nd Qtr 98	Wiethane		
		1st Qtr 98			
		2nd Qtr 98			
		3rd Qtr 98	Methane		
		4th Qtr 98			
		1st Qtr 99			
		1st Qtr 98			
		2nd Qtr 98			
	VW04-23	3rd Qtr 98			
		4th Qtr 98	Benzene		
		1st Qtr 99			
		2nd Qtr 99			
		3rd Qtr 99			
2		2nd Qtr 98			
		4th Qtr 98	Vinyl Chloride		
		3rd Qtr 99			
		2nd Qtr 98			
		3rd Qtr 98			
		4th Qtr 98	3.41		
		1st Qtr 99	Methane		
		2nd Qtr 99			
		3rd Qtr 99			
	VW43-19	1st Qtr 98			
		2nd Qtr 98			
		3rd Qtr 98	H		
		4th Qtr 98	Vinyl Chloride		
		1st Qtr 99			
	ļ	2nd Qtr 99			
	ļ	3rd Qtr 99			

TABLE 4.18C CRITICAL WELLS IN AREA 2 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 2 of 5

			Page 2 of 5	
AREA	WELL	DATE OF	CONSTITUENT	
AKEA	INDENTIFICATION	SAMPLE	CONSTITUENT	
	·	1st Qtr 98	_	
		2nd Qtr 98		
		3rd Qtr 98	Methane	
		4th Qtr 98	Methane	
		2nd Qtr 99	ļ	
		3rd Qtr 99		
	VW43-32	1st Qtr 98		
		2nd Qtr 98		
		3rd Qtr 98		
		4th Qtr 98	Vinyl Chloride	
		1st Qtr 99		
		2nd Qtr 99		
		3rd Qtr 99		
		3rd Qtr 98		
2		4th Qtr 98	Methane	
		1st Qtr 99		
		2nd Qtr 99		
		3rd Qtr 99		
		4th Qtr 99		
		4th Qtr 98		
	VW45-12	1st Qtr 99		
	V W 45-12	2nd Qtr 99	Benzene	
		3rd Qtr 99		
		4th Qtr 99		
		4th Qtr 98	cis-1,2-Dichloroethene	
		4th Qtr 98		
		2nd Qtr 99	0 V. 1	
		3rd Qtr 99	m- & p-Xylenes	
		4th Qtr 99		
		101 20 77		

TABLE 4.18C CRITICAL WELLS IN AREA 2 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 3 of 5

Page 3 o					
AREA	WELL	DATE OF	CONSTITUENT		
ARLA	INDENTIFICATION	SAMPLE	CONSTITUENT		
		4th Qtr 98	Toluene		
		4th Qtr 99	rotuciic		
		4th Qtr 98	trans-1,2-Dichloroethene		
ļ		2nd Qtr 99	trans-1,2-Diemoroculene		
	1/11/45 12	3rd Qtr 98			
	VW45-12	4th Qtr 98			
		1st Qtr 99	Vinyl Chloride		
		2nd Qtr 99	vinyi Cilionide		
		3rd Qtr 99			
		4th Qtr 99			
		1st Qtr 98			
		2nd Qtr 98			
		3rd Qtr 98			
		4th Qtr 98	.		
		1st Qtr 99	Methane		
		2nd Qtr 99			
2		3rd Qtr 99			
		4th Qtr 99	-		
		1st Qtr 98			
		2nd Qtr 98			
		4th Qtr 98			
	VW45-22	1st Qtr 99	Benzene		
		2nd Qtr 99			
		3rd Qtr 99			
		4th Qtr 99			
		2nd Qtr 98	cis-1,2-Dichloroethene		
		1st Qtr 98			
	ļ	2nd Qtr 98			
		3rd Qtr 98			
		4th Qtr 98	Vinyl Chloride		
		1st Qtr 99	'myr emoriae		
		2nd Qtr 99			
		3rd Qtr 99			
		4th Qtr 99			

TABLE 4.18C CRITICAL WELLS IN AREA 2 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 4 of 5

			Page 4 of 5
AREA	WELL	DATE OF	CONSTITUENT
AKLA	INDENTIFICATION	SAMPLE	CONSTITUENT
		1st Qtr 98	
		2nd Qtr 98	
		3rd Qtr 98	
		1st Qtr 99	Methane
•		2nd Qtr 99	
		3rd Qtr 99	
	VW45-30	4th Qtr 99	
		1st Qtr 98	Benzene
		4th Qtr 98	
		1st Qtr 99	
		2nd Qtr 99	Vinyl Chloride
		3rd Qtr 99	
		4th Qtr 99	
		1st Qtr 98	
		3rd Qtr 98	
		4th Qtr 98	Methane
		1st Qtr 99	
2		3rd Qtr 99	
		1st Qtr 98	
		3rd Qtr 98	
		4th Qtr 98	D
	VW48-08	1st Qtr 99	Benzene
		2nd Qtr 99	
		3rd Qtr 99	
		1st Qtr 98	
		3rd Qtr 98	
!		4th Qtr 98	Min. 1 Chl
		1st Qtr 99	Vinyl Chloride
	İ	2nd Qtr 99	
		3rd Qtr 99	
		1st Qtr 98	
	ľ	2nd Qtr 98	
	VW48-17	3rd Qtr 98	Methane
		4th Qtr 98	
		1st Qtr 99	
		3rd Qtr 99	

TABLE 4.18C CRITICAL WELLS IN AREA 2 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 5 of 5

	SUCLI	DATE OF	
AREA	WELL	DATE OF	CONSTITUENT
/ HCL/ I	INDENTIFICATION	SAMPLE	———
		1st Qtr 98	
		2nd Qtr 98	
		3rd Qtr 98	
	VW48-17	4th Qtr 98	Benzene
		1st Qtr 99	
		2nd Qtr 99	
2		3rd Qtr 99	
2		1st Qtr 98	
		2nd Qtr 98	
		3rd Qtr 98	
	VW48-35	4th Qtr 98	Methane
		1st Qtr 99	
		3rd Qtr 99	
		4th Qtr 99	

94-256 Rpts RD Rev. 2.0 (5.3 01 ks)



TABLE 4.18D

CRITICAL WELLS IN AREAS 4, 5 AND 7 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

			Page 1 of 2
AREA	AREA CRITICAL WELL(1)		CONSTITUENT
		1st Qtr 98	Methane
4	VW06-34	1st Qtr 98	Vinyl Chloride
	VW30-35	2nd Qtr 98	Methane
		1st Qtr 98	
		2nd Qtr 98	
		3rd Qtr 98	
		4th Qtr 98	
		1st Qtr 99	Methane
		2nd Qtr 99	
		3rd Qtr 99	
	VW51-18	4th Qtr 99	
		2nd Qtr 98	
		3rd Qtr 98	
		4th Qtr 98	
		1st Qtr 99	Benzene
		2nd Qtr 99	
		3rd Qtr 99	
		4th Qtr 99	
ļ		1st Qtr 98	
5		2nd Qtr 98	
		4th Qtr 98	
		1st Qtr 99	Methane
		2nd Qtr 99	
		3rd Qtr 99	
		4th Qtr 99	
		1st Qtr 98	Benzene
		3rd Qtr 98	PCE
	VW51-30	1st Qtr 99	
	1 1131 30	1st Qtr 99	
		2nd Qtr 99	Trichloroethene
•		3rd Qtr 99	THOMOTOCHICIE
		4th Qtr 99	
		1st Qtr 98	
		2nd Qtr 98	
		4th Qtr 98	Vinyl Chloride
		1st Qtr 99	
		2nd Qtr 99	
		4th Qtr 99	

⁽¹⁾ A critical well is defined as a well with ITSL exceedances during the past 2 years.



TABLE 4.18D

CRITICAL WELLS IN AREAS 4, 5 AND 7 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 2 of 2

			Page 2 of 2
AREA	CRITICAL WELI(1)	DATE OF	CONSTITUENT
AKLA	CRITICAL WELLS-7	SAMPLE	CONSTITUENT
		2nd Qtr 98	
		3rd Qtr 98	
		4th Qtr 98	
		1st Qtr 99	Methane
	MP01-15	2nd Qtr 99	
		3rd Qtr 99	
		4th Qtr 99	
		2nd Qtr 98	Benzene
		3rd Qtr 98	Denzene
5	MP02-15	2nd Qtr 98	
		3rd Qtr 98	
		4th Qtr 98	•
		1st Qtr 99	Methane
		2nd Qtr 99	
		3rd Qtr 99	
		4th Qtr 99	
		2nd Qtr 98	
1		3rd Qtr 98	Benzene
		4th Qtr 98	
		1st Qtr 98	
		2nd Qtr 98	
		3rd Qtr 98	
7	VW25-35	4th Qtr 98	Methane
		1st Qtr 99	
		2nd Qtr 99	
		3rd Qtr 99	

30747/Rpts RD Rev. 2 0 (5/3 01/ks)



 $^{^{(1)}}$ A critical well is defined as a well with ITSL exceedances during the past 2 years.

TABLE 4.18E

CRITICAL WELLS IN AREA 8 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

			Page 1 of 4
AREA	CRITICAL WELL(1)	DATE OF SAMPLE	CONSTITUENT
]		1st Qtr 98	
		2nd Qtr 98	Methane
]		4th Qtr 98	
		2nd Qtr 99	
	177712 21	1st Qtr 98	
	VW13-31	2nd Qtr 98	
		3rd Qtr 98	
		4th Qtr 98	Vinyl Chloride
		1st Qtr 99	
		2nd Qtr 99	
		3rd Qtr 99	
		4th Qtr 98	1,2-Dichloropropene
	VW14-35	1st Qtr 99	1,2-Diemoropropene
		1st Qtr 98	
		2nd Qtr 98	Vinul Chlorida
		2nd Qtr 99	Vinyl Chloride
8		3rd Qtr 99	
	VW21-36	1st Qtr 98	Trichloroethene
		1st Qtr 98	
		2nd Qtr 98	
<u> </u>		3rd Qtr 98	
	VW22 26	4th Qtr 98	Tuicklaneathan
	VW22-35	1st Qtr 99	Trichloroethene
		2nd Qtr 99	
		3rd Qtr 99	
		4th Qtr 99	
j l		1st Qtr 98	-
]		2nd Qtr 98	
1		3rd Qtr 98	
	VW23-36	4th Qtr 98	Trichloroethene
Į		1st Qtr 99	
1		2nd Qtr 99	
		3rd Qtr 99	

⁽¹⁾ A critical well is defined as a well with ITSL exceedances during the past 2 years.

TABLE 4.18E

CRITICAL WELLS IN AREA 8 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 2 of 4

		, , , , , , , , , , , , , , , , , , , ,	rage 2 01 4		
AREA	CRITICAL WELI(1)	DATE OF	CONSTITUENT		
MCLA	CRITICAL WEEK'	SAMPLE	CONSTITUTION		
		1st Qtr 98			
		2nd Qtr 98			
	VW23-36	3rd Qtr 98	Vinyl Chloride		
		2nd Qtr 99			
		3rd Qtr 99			
	VW33-35	1st Qtr 98	Trichloroethene		
		1st Qtr 98			
	VW40-10	4th Qtr 98	Tatusahlanaathana		
	VW49-18	2nd Qtr 99	Tetrachloroethene		
		4th Qtr 99			
		1st Qtr 98			
	VW49-30	2nd Qtr 98	Tetrachloroethene		
		2nd Qtr 99			
	VW52-19	1st Qtr 99	1,2-Dichloropropene		
	VW52-30	4th Qtr 98			
8		1st Qtr 99	1,2-Dichloropropene		
		2nd Qtr 99			
		3rd Qtr 99	Methane		
	VW53-10	3rd Qtr 98	Vinul Chlorida		
		3rd Qtr 99	Vinyl Chloride		
		3rd Qtr 98			
		1st Qtr 99			
	VW53-20	2nd Qtr 99	Trichloroethene		
		3rd Qtr 99			
		4th Qtr 99			
		3rd Qtr 98			
		4th Qtr 98			
	VW53-30	1st Qtr 99	Trichloroethene		
	V VV 33-3U	2nd Qtr 99	THEMOTOCHICAE		
		3rd Qtr 99			
		4th Qtr 99			

⁽¹⁾ A critical well is defined as a well with ITSL exceedances during the past 2 years.



TABLE 4.18E CRITICAL WELLS IN AREA 8 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 3 of 4

		· · · · · · · · · · · · · · · · · · ·	Page 3 of 4
AREA	CRITICAL WELL(1)	DATE OF	CONSTITUENT
THUST	entitient webb	SAMPLE	CONSTITUENT
		4th Qtr 98	
	VW55-05	1st Qtr 99	Methane
		2nd Qtr 99	
		1st Qtr 99	Methane
1		4th Qtr 98	
		1st Qtr 99	Tui alal aug ath aug
		2nd Qtr 99	Trichloroethene
	NW166 10	3rd Qtr 99	
	VW55-18	4th Qtr 98	···
		1st Qtr 99	
		2nd Qtr 99	Vinyl Chloride
		3rd Qtr 99	•
		4th Qtr 99	
	VW55-29	4th Qtr 98	
		1st Qtr 99	Trichloroethene
		3rd Qtr 99	
		4th Qtr 98	
8		1st Qtr 99	
		2nd Qtr 99	Vinyl Chloride
		3rd Qtr 99	•
		4th Qtr 99	
		4th Qtr 98	
	VW56-08	3rd Qtr 99	Vinyl Chloride
		4th Qtr 99	•
		4th Qtr 98	
		1st Qtr 99	
	VW56-17	2nd Qtr 99	Trichloroethene
		3rd Qtr 99	
		4th Qtr 99	
		4th Qtr 98	
		1st Qtr 99	
	VW56-28	2nd Qtr 99	Trichloroethene
		3rd Qtr 99	
		4th Qtr 99	

⁽¹⁾ A critical well is defined as a well with ITSL exceedances during the past 2 years.

TABLE 4.18E

CRITICAL WELLS IN AREA 8 WHICH EXCEED INTERIM THRESHOLD LIMITS VAPOR WELL MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

Page 4 of 4

			Page 4 of 4
AREA	CRITICAL WELI(1)	DATE OF	CONSTITUENT
		SAMPLE	
		4th Qtr 98	
	VW57-18	1st Qtr 99	Trichloroethene
		2nd Qtr 99	
		4th Qtr 98	
		1st Qtr 99	
	VW57-27	2nd Qtr 99 Trichoroethene	
		3rd Qtr 99	
		4th Qtr 99	
		4th Qtr 98	·
		1st Qtr 99	
	VW58-08	2nd Qtr 99	Trichloroethene
		3rd Qtr 99	
		4th Qtr 99	
8		4th Qtr 98	
0		1st Qtr 99	
	VW58-19	2nd Qtr 99	Trichloroethene
		3rd Qtr 99	
i		4th Qtr 99	
		4th Qtr 98	
		1st Qtr 99	
	VW58-29	2nd Qtr 99	Trichloroethene
		3rd Qtr 99	
		4th Qtr 99	
		4th Qtr 98	
		1st Qtr 99	
1	VW61-19	2nd Qtr 99	Vinyl Chloride
l		3rd Qtr 99	
		4th Qtr 99	30747 Parts 915 Post 3 015 3 01 kg

30747 Rpts RD Rev. 2,045-3-01.ks)

⁽¹⁾ A critical well is defined as a well with ITSL exceedances during the past 2 years.

TABLE 4.19

1998 IN-BUSINESS AIR MONITORING FREQUENCY WASTE DISPOSAL, INC. SUPERFUND SITE

SITE	SAMPLE I.D.	COMPANY NAME	ADDRESS		,		SAMPLI	E DATES			
AREA	SAMPLE I.D.	COMPANT NAME	ADDRESS	2/8/98	3/8/98	4/5/98	5/3/98	7/26/98	11/8/98	2/8/99	4/26/99
1	WDI-IBM 03B	R&R Sprouts	12633 E. Los Nietos Rd.				Х		X	Х	х
	WDI-IBM 22	E&L Electric ⁽¹⁾	9632 Santa Fe Springs Rd.	Х		X					
2	WDI-IBM 24	C&E Die & Fab	12637B Los Nietos Rd.	Х	Х	X	Х	Х	Х	Х	х
	WDI-IBM 24Amb	C&E Die & Fab (Ambient Air Sample)	12637B Los Nietos Rd. (outside building)		X	х	Х	х	Х	X	х
5	WDI-IBM 50	Brothers Machine Shop	9843 Greenleaf Ave.	Х	X	Х	X	х	X	Х	x
7	WDI-IBM 49	Ambient Air Sample ⁽²⁾	Southeast Corner of Los Nietos Rd. and Greenleaf Ave.	Х	Х	х	Х	Х	Х	X	х
8	WDI-IBM 03	Stansell Brothers	12635 E. Los Nietos Rd.	х				х	х	Х	х
	WDI-IBM 12	Bell Auto Body	12469 Los Nietos Rd.						x		
	WDI-IBM 24B	Buffalo Bullet	12637A Los Nietos Rd.	х	X	х	х	х	х	Х	X
	WDI-IBM 32	Davco/Neptune	12757 Los Nietos Rd.			x					
	WDI-IBM 37	George Ortega									х
	WDI-IBM 41	H&H Contractors	12811 E. Los Nietos Rd.	х	Х	Х	х	х	X	х	X



⁽¹⁾ Property purchased by Gold Coast Refractory, 9630 Santa Fe Springs Road in March 1998.

⁽²⁾ Campbell Property (southeast corner of Area 7).

TABLE 4.19A

1999 IN-BUSINESS AIR MONITORING FREQUENCY WASTE DISPOSAL, INC. SUPERFUND SITE

SITE	SAMPLE I.D. COMPANY NAME		ADDRESS		SAMPLE DATES			
AREA	SAMPLE I.D.	COMPANY NAME	ADDRESS	2/8/99	4/26/99	8/2/99	11/8/99	
1	WDI-IBM-03B	R&R Sprouts	12633E Los Nietos Rd.	X	х	Х		
2	WDI-IBM-24	C&E Die & Fab	12637B Los Nietos Rd.	X	x	Х	X	
	WDI-IBM-24Amb	C&E Die & Fab (Ambient Air Sample)	12637B Los Nietos Rd. (outside building)	Х	х	х	х	
	WDI-IBM-26	(Ambient Air Sample) ⁽¹⁾				х		
	WDI-IBM-TM-13 Containment Area	(Ambient Air Sample) ⁽²⁾				х		
3	WDI-IBM-51	(Ambient Air Sample) ⁽³⁾				Х		
5	WDI-IBM-50	Brothers Machine and Tool	9843 Greenleaf Ave.	Х	Х	X	х	
7	WDI-IBM-49	Ambient Air Sample ⁽⁴⁾	Southeast Corner of Los Nietos Rd. and Greenleaf Ave.	Х	х	х	Х	
8	WDI-IBM-03	Stansell Brothers	12635E Los Nietos Rd.	Х	Х			
	WDI-IBM-24B	Buffalo Bullet	12637A Los Nietos Rd.	Х	х	х	х	
	WDI-IBM-37	Durango Designer	12803 Los Nietos Rd.		х		х	
	WDI-IBM-41	H&H Contractors	12811F Los Nietos Rd.	х	х	Х	х	



⁽¹⁾ Bennett Property (northeast corner of Area 2).

⁽²⁾ Bennett Property (southeast corner of Area 2 in TM No. 13 containment area).

⁽³⁾ Bennett Property (south central corner of Area 3).

⁽⁴⁾ Campbell Property (southeast corner of Area 7).

CHEMICAL INVENTORY OF ONSITE BUSINESSES WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

		1 age 1 of 2	
BUSINESS	CHEMICAL PRODUCTS USED WITHIN THE BUILDING (from EPA Inventory)	ADDITIONAL CHEMICALS IDENTIFIED DURING IN-BUSINESS AIR MONITORING BY WDIG	
Brothers Machine Shop 9843 Greenleaf Avenue Contact: Enrique Razo Date of EPA Inspection: 1/7/98	According to Mr. Razo, the only chemicals used at their facility is hydraulic oil for their machines (Western Basin Soluble Oil) and diesel fuel for their vehicles. Diesel fuel is stored in one 5-gallon gas can in the north corner of the building. There are three 5-gallon containers of oil stored in plastic buckets inside the building. No MSDS was available for review.	Identified several cans of WD-40 spray lubricant which contains methyl ethyl ketone and toluene along with many VOCs.	
E&L Electric 9632 Santa Fe Springs Rd. Contact: Mike Fitch Date of EPA Inspection: 1/7/98	The main chemicals used at this building are the Safety-Kleen solvent tank and varnish. The following information was provided in the MSDS for the Safety-Kleen solvent and the varnish: Safety-Kleen 105 Solvent Recycled-California Hazardous Components - hydrotreated light petroleum distillates (Petroleum Naphtha [99 to 100%]); Tetrachloroethene (0 to 0.5%); 1,1,1-Trichloroethane (0 to 0.5%). The Safety - Kleen solvent also contains detectable amounts of benzene, carbon tetrachloride, 1,2-dichlorobenzene, dichloroethane, toluene and trichloroethene. Polyester Resin Solution (varnish) Hazardous component - organic peroxide (1.0% to 1.4% by weight)	E&L Electric was replaced by Gold Coast Refractory. Identified various paints, spray lubricants (WD-40), and foam insulation products. Refractory units operate on some weekends, which may contribute to airborne VOC load.	
Buffalo Bullet 12637A Los Nietos Rd. Date of EPA Inspection: 11/20/97 and 1/7/97	(1)	Various cleaning solvents (Safety-Kleen, kerosene and naphtha) used during degreasing.	
C&E Die Fab 12637B Los Nietos Rd Contact: Mark Ellis Date of EPA Inspection: 11/20/97	Fifteen gallons of cleaning solvent (UN-1255 Petrolube, Inc.) Cutting oil, 15 gallons of machine oil, 15 gallons of turbine oil, 15 gallons of Metal Working Fluid (Grade 503), 15 gallons of Soluble Oil, 1-gallon of parts cleaning solvent (open can in warehouse).	Identified various cleaning solvents including naphtha, lacquer thinner, kerosene and parts dip. Spray lubricants were also observed.	



⁽¹⁾ Only the secretary was at the business at the time of both inspections. Thus, a list of chemical products used within the building was not available.

CHEMICAL INVENTORY OF ONSITE BUSINESSES WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 2

		rage 2 01 2
BUSINESS	CHEMICAL PRODUCTS USED WITHIN THE BUILDING (from EPA Inventory)	ADDITIONAL CHEMICALS IDENTIFIED DURING IN-BUSINESS AIR MONITORING BY WDIG
Bell Auto Body 12469 Los Nietos Rd. Contact: Luis Reyna Date of EPA Inspection: 1/7/98	According to Mr. Reyna, their facility mostly uses paint, paint thinner, and various oils including WD-40. The business is an autobody shop and is surrounded by used cars, including a car inside the shop.	Various fiberglass resins, acetone and catalysts were observed. Various spray cans containing paints, lubricants and primers were; identified. Gasoline cans were also observed in the building.
R&R Sprouts 12633 Los Nietos Rd. Date of EPA Inspection: 1/7/98	This business grows alfalfa sprouts for juice bars. The only chemicals used at this business is chlorine bleach to clean tanks. No solvents or oils are used in this building.	None.
Stansell Brothers 12635 E. Los Nietos Rd. Contact: Vernon Stansell Date of EPA Inspection: 1/7/98	According to Mr. Stansell, their business uses acetone, cutting oil, WD-40, Sup-'N'-Kleen Aerosol (contains isobutane, ethylene glycol, and monbuytyl ether). Mr. Stansell provided the MSDSs for other chemicals used at his business. The following information was provided in the MSDSs: Zep ESP (General Purpose Cleaner) - contains d-propyelene glycol methyl ether	Observed containers with naphtha and other degreasers. Spray cans with mold release agents were also observed.
	(<5%). Shell Tetlus Oil 32 (industrial oil) - contains Shell Tellus Oil and solvent refined, hydrotreated heavy paraffinic distillate.	
	Shell Tonna Oil 68 (lubricating oil) - contains Shell Tonna Oil 68; catalytic dewaxed heavy paraffinic distillate; and hydrotreated heavy paraffinic distillate. Dromus B (solvent refined petroleum grade). Garia Oil (cutting oil) (8% fatty oil). 1-k-Kerosene (may contain sulfur and benzene).	
H&H Contractors 12811 E. Los Nietos Rd. Date of EPA Inspection: 1/7/98	No data.	Various cans of glue, varnish, shellac and paint thinner were observed in the building. Several gasoline cans were also stored in the building.

94-256/Rpts/ReDeInSuRe Rev. 1 (8/4/99/ey)



TABLE 4.21

1998 INTERIM THRESHOLD SCREENING LEVEL EXCEEDANCES **DURING IN-BUSINESS AIR MONITORING** WASTE DISPOSAL, INC. SUPERFUND SITE

AREA ⁽¹⁾	COMPANY NAME	SAMPLE I.D.	NO. OF SAMPLE ROUND(S) PERFORMED IN 1998	SAMPLE DATE WITH EXCEEDANCE	CONSTITUENT DETECTED ABOVE ITSL ⁽²⁾	INDOOR AIR THRESHOLD LIMIT (ppb)	CONCENTRATION (ppb)
1	R&R Sprouts	IBM-03B	2	11/98	Benzene	2.0	9.4
ľ	Gold Coast	IBM-22	2	4/98	Benzene	2.0	2.4
5	Brothers Machine & Tool	IBM-50	6	11/98	Benzene	2.0	2.1
7	Campbell	IBM-49 ⁽³⁾	6	2/98	Benzene	2.0	390
	Property			2/98	Toluene	212	6,700
				2/98	Ethylbenzene	490	1,000
				2/98	m & p-xylene	142.8	2,900
				2/98	o-xylene	142.8	1,200
8	Stansell Brothers	IBM-03	3	2/98	Acetone	312	1,900
				2/98	Benzene	2.0	4.6
				7/98	Benzene	2.0	2.3
				11/98	Benzene	2.0	4.7
	Bell Auto Body	IBM-12	1	11/98	Benzene	2.0	6.5
	Buffalo Bullet	IBM-24B	6	7/98	Benzene	2.0	2.7
	H&H Contractors	IBM-41	6	2/98	Benzene	2.0	4.7
				4/98	Benzene	2.0	4.6
				5/98	Benzene	2.0	5.8
				7/98	Benzene	2.0	7.2
				11/98	Benzene	2.0	5.7

ppb = parts per billion



 ⁽¹⁾ Area 2 had no ITSL exceedances.
 (2) Vinyl chloride has threshold limit of 0.25 ppb. The laboratory's reporting limit was higher than the threshold limit.
 However, no exceedance of the laboratory's reporting limit were detected.

⁽³⁾ Identified as ambient air sample.

TABLE 4.21A

1999 INTERIM THRESHOLD SCREENING LEVEL EXCEEDANCES **DURING 1999 IN-BUSINESS AIR MONITORING** WASTE DISPOSAL, INC. SUPERFUND SITE

AREA ⁽¹⁾	COMPANY NAME	SAMPLE I.D.	NO. OF SAMPLE ROUNDS PERFORMED IN 1999	SAMPLE DATE WITH EXCEEDANCE	CONSTITUENT DETECTED ABOVE ITSL ⁽²⁾	INDOOR AIR THRESHOLD LIMIT (ppb)	CONCENTRATION (ppb)
1	R&R Sprouts	IBM-03B	3	2/99	Benzene	2.0	2.0
				8/99	Chloroform	3.4	10.0
2	C&E Die and Fab	IBM-24	4	2/99	Benzene	2.0	2.8
				11/99	Acetone	312	880(3)
5	Brothers Machine	IBM-50	4	2/99	Benzene	2.0	2.1
	& Tool			8/99	Benzene	2.0	16 ⁽⁴⁾
8	Stansell Brothers	IBM-03	2	2/99	Acetone	312	750 ⁽⁵⁾
					Benzene	2.0	6.6 ⁽⁶⁾
				4/99	Acetone	312	640 ⁽⁵⁾
					Benzene	2.0	6.4(6)
	Buffalo Bullet	IBM-24B	4	2/99	Benzene	2.0	2.4
	Durango Designs	IBM-37	2	4/99	TCE	8.2	12
				11/99	TCE	8.2	42
	H&H Contractors	IBM-41	4	2/99	Benzene	2.0	3.9 ⁽⁷⁾
					PCE	10.6	22 ⁽⁸⁾
				4/99	Acetone	312	340 ⁽⁸⁾
					Benzene	2.0	3.2 ⁽⁷⁾
				8/99	Acetone	312	490 ⁽⁸⁾
					Benzene	2.0	2.6 ⁽⁷⁾
				11/99	Acetone	312	430 ⁽⁸⁾
					Benzene	2.0	2.4 ⁽⁷⁾

(1) Area 7 did not have ITSL exceedances.

(2) Vinyl chloride has threshold limit of 0.25 ppb. The laboratory reporting limit was higher than the threshold limit. However, exceedance of the laboratory reporting limit were not detected.

- (3) Acetone and MEK are voluntarily used by C&E Die and Fab.
- (4) Diesel fuel is used in vehicles at Brothers.
- (5) Acetone is routinely used by Stansell Brothers.
 (6) Kerosene which may contain benzene is used by Stansell Brothers.
- (7) Several gasoline cans are stored in the H&H contractors building.
- (8) Various cans of glue, varnish, shellac and paint thinner were observed in the building.

ppb = parts per billion



TABLE 4.21B

SUMMARY OF TREND DATA FOR SELECTED IN-BUSINESS AIR SAMPLE LOCATIONS FOR ACETONE, BENZENE, ETHYLBENZENE, m- & p-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE

WASTE DISPOSAL, INC. SUPERFUND SITE

SAMPLE	SAMPLE		1998								1999			
NUMBER	LOCATION	CONSTITUENTS(1)	Feb	Mar	Apr	2ndQ	3rdQ	4thO	1stQ	2ndQ	3rdO	4thC		
		Acetone	1,900	14141	Дрі	ZildQ	270	290	750	640	JiuQ	7010		
		Benzene	4.6				2.3	4.7	6.6	6.4		 		
		Ethylbenzene	5.8				1.8	2.5	7	11	 	-		
		m- & p-Xylene	24				7.0	8.2	25	44		 		
IBM-03	Stansell Brothers	Methane	3.1				3.5	3.2	3.9	2.8		 		
15.11 05	Bullisen Broakers	PCE	2				ND	ND	ND	ND				
		TCE	ND				ND	ND	ND	ND		 		
		Toluene	45				12	15	48	63		\vdash		
		Vinyl Chloride	ND				ND	ND	ND	ND		 		
	·	Acetone				12		30	24	24	16	_		
		Benzene				ND		9.4	2.0	1.4	1.1	_		
		Ethylbenzene				ND	_	ND	ND	ND	ND	 		
		m- & p-Xylene				1.3		2.2	3.1	3.4	1,3	 		
IBM-3B	R & R Sprouts	Methane				2.3		4.1	3.8	2.9	1.9			
	The Kopical	PCE				ND		ND	ND	ND	ND	†		
		TCE				ND		ND	ND	ND	ND			
1		Toluene				2.6		4.9	6.3	5.6	3.3			
		Vinyl Chloride				ND		ND	ND	ND	ND			
		Acetone	27	5.9	13	9.3	12	20	45	19	22	880		
		Benzene	1.4	1.0	1.0	ND	ND	1.7	28	ND	ND	NE.		
	i	Ethylbenzene	ND	ND	ND	ND	ND	ND	2.3	ND	ND	1.2		
		m- & p-Xylene	2.6	1.1	ND	1.8	1.1	2.0	9.6	1.7	1.9	4.3		
IBM-24	C & E Die	Methane	2.8	2.5	2.6	2.2	2.9	3.3	3.2	2.4	1.8	3.0		
		PCE	0.7	ND	2.1	4.7	ND	ND	ND	ND	ND	NE		
		TCE	ND	ND	ND	1.1	ND	ND	ND	ND	ND	NE		
		Toluene	9.3	3.2	2.9	14	3.4	4.7	6.7	2.3	17	9.4		
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.1		
		Acetone	12	17	8.9	11	8	8.9	12	34	15	14		
		Benzene	1.2	1.1	ND	ND	2.7	1.7	2.4	1.6	ND	1.0		
		Ethylbenzene	ND	ND	ND	ND	ND	ND	1.8	6.0	ND	NE		
		m- & p-Xylene	1.7	1.4	ND	1.3	1.0	1.3	4.2	28.0	1.3	1.7		
IBM-24B	Buffalo Bullets	Methane	3.8	3.3	3.9	2.7	3.5	3.0	4.4	2.9	2.5	4.:		
		PCE	0.6	ND	0.9	ND	ND	ND	ND	0.8	3.6	NI		
		TCE	ND	ND	ND	ND	ND	ND	1.0	ND	ND	NI		
		Toluene	4.7	3.9	3.1	3.6	3.0	2.6	2.5	11	3.6	3.9		
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI		
		Acetone								12		28		
		Benzene			i — —					1.3		0.		
		Ethylbenzene			<u> </u>	Ì			l	ND		0.		
	l	m- & p-Xylene							<u> </u>	1.1		2.		
IBM-37	Durango Designs	Methane								2.1		2.		
		PCE			i –			1		ND		N		
	1	TCE			· · · · ·				t	12.0		42		
		Toluene			İ					5.0	Ť	6.		
		Vinyl Chloride				†	-	i		ND		NI NI		

⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold number show concentrations that exceeded 50 percent of the Indoor Air Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (156 ppbv); benzene (1.0 ppbv); ethylbenzene (245 ppbv); m- & p-xylenes (71.4 ppbv); methane (6,250 ppmv); PCE (5.3 ppbv); TCE (4.1 ppbv); toluene (106 ppbv) and vinyl chloride (0.125 ppbv).

TABLE 4.21B

SUMMARY OF TREND DATA FOR SELECTED IN-BUSINESS AIR SAMPLE LOCATIONS FOR ACETONE, BENZENE, ETHYLBENZENE, m- & p-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE

WASTE DISPOSAL, INC. SUPERFUND SITE

Page 2 of 2

SAMPLE	SAMPLE	CONGRETATION (CO.)			19	998				Page 2 of 2			
NUMBER	LOCATION	CONSTITUENTS(1)	Feb	Mar	Apr	2ndQ	3rdQ	4thQ	lstQ	2ndQ	3rdQ	4thQ	
		Acetone	46	ND	37	53	50	94	200	340	490	430	
		Benzene	4.1	ND	4.6	5.8	7.2	5.7	3.9	3.2	2.6	2.4	
		Ethylbenzene	6.0	ND	3.2	6.3	4.8	4.6	5.1	8.2	6.3	5.9	
		m- & p-Xylene	24	ND	12	23	17	17	20	32	32	22	
IBM-41	H & H Contractors	Methane	3.5	ND	3.1	2.4	3.1	2.8	2.8	2.2	1.5	1.6	
		PCE	3.0	ND	ND	ND	1.4	11.0	22.0	34.0	ND	ND	
	1	TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Toluene	64	ND	34	48	34	52	91	61	180	140	
	1	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Acetone	17	8	6	66	15	25	110	24	20	35	
	1	Benzene	1.0	1.1	ND	1.1	1.6	2.1	2.1	1.2	16	1.0	
		Ethylbenzene	ND	ND	0.7	ND	ND	2.5	1.1	ND	ND	ND	
		m- & p-Xylene	1.4	1.4	2.5	1.4	1.8	11	4.4	1.1	1.6	1.7	
IBM-50	Brothers Machine	Methane	2.7	2.5	2.6	2.1	3.0	2.8	2.9	2.3	1.8	2.2	
	& Tool	PCE	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	1	TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Toluene	3.8	3.9	2.7	3.9	5.3	8	6.2	2.6	5.7	2.8	
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Acetone		5.6	3.7	8.8	6.7	8.3	9.4	290	9.5	26	
		Benzene		1.2	ND	ND	ND	1.8	1.7	1.0	1.1	ND	
		Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	
		m- & p-Xylene		ND	0.8	1.2	0.9	1.3	2.3	2.2	1.4	1.7	
IBM-24AMB	Ambient Air	Methane		2.9	2.7	2.1	2.9	3.6	4.0	3.4	2.5	3.0	
		PCE		ND	ND	ND	ND	ND	ND	ND	ND	ND	
		TCE		ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Toluene		3.2	2.1	2.5	6.9	2.6	4.8	3.2	3.0	3.2	
	<u> </u>	Vinyl Chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Acetone	21	4.6	5.3	4.3	5.6	24	22	7.7	12	13	
		Benzene	390	1.5	ND	1.1	1.4	1.5	ND	1.1	1.3	1.0	
		Ethylbenzene	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		m- & p-Xylene	2,900	1.9	1.3	1.6	3.0	1.8	2.5	1.5	3.0	1.6	
IBM-49	Ambient Air	Methane	2.6	2.5	2.4	2.1	2.5	2.7	2.5	2.5	1.8	2.1	
		PCE	ND	ND	1.1	ND	ND	ND	1.7	ND	ND	ND	
		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Toluene	6,700	4.9	2.9	4.2	3.7	3.1	5.2	2.7	4	3.0	
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold number show concentrations that exceeded 50 percent of the Indoor Air Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (156 ppbv); benzene (1.0 ppbv); ethylbenzene (245 ppbv); m- & p-xylenes (71.4 ppbv); methane (6,250 ppmv); PCE (5.3 ppbv); TCE (4.1 ppbv); toluene (106 ppbv) and vinyl chloride (0.125 ppbv).

Shaded area indicates that data was not collected due to access problems.

SUMMARY OF ZONE OF INFLUENCE BY SITE AREA WASTE DISPOSAL, INC. SUPERFUND SITE

AREA	ESTIMATED ZONE OF INFLUENCE RADIUS (feet)
Area 5	
 Shallow 	37
• Deep	176
West Corner of Area 2	
 Shallow 	(1)
• Deep	> 200
Area 7	
• Shallow	37
• Deep	> 200
Area 8	
• Shallow	32
• Deep	122
RV Storage Lot (Area 2)	
Shallow	24

94-256/Rpts/ReDeInSuRe Rev. 2.0 (5/4/01/rw)

(1) Data was inconsistent, and could not be evaluated. However, a zone of influence of approximately 30 feet was observed in the field based on the vacuum level observed in SMP-2 (20 feet) and SMP-3 (30 feet).

TABLE 4.23

SUMMARY OF GASSOLVE MODELING RESULTS WASTE DISPOSAL, INC. SUPERFUND SITE

	AVERAGE						
AREA	Horizontal Permeability (meters ²)	Leakage (meters ²)	Sum of Square	Average Error (%)			
Area 5							
Shallow Soils	1.87 x 10 ⁻⁸	3.82 x 10 ⁻¹¹	8.94 x 10 ⁻⁸	33.64			
Deep Soils	8.99 x 10 ⁻¹¹	2.58 x 10 ⁻¹³	8.65 x 10 ⁻⁷	3.099			
West Corner of Area 2							
Shallow Soils	6.69 x 10 ⁻¹¹	1.47 x 10 ⁻¹⁰	2.31 x 10 ⁻⁸	0.368			
Deep Soils	3.67 x 10 ⁻¹¹	1.32 x 10 ⁻¹⁴	5.12 x 10 ⁻⁶	1.907			
Area 7							
Shallow Soils	6.27 x 10 ⁻¹²	2.79 x 10 ⁻¹²	2.77 x 10 ⁻⁷	0.924			
Deep Soils	5.4 x 10 ⁻¹⁰	5.86 x 10 ⁻¹⁴	3.9 x 10 ⁻⁷	4.008			
Area 8							
Shallow Soils	1.34 x 10 ⁻¹⁰	2.52 x 10 ⁻¹¹	7.52 x 10 ⁻⁸	1.719			
Deep Soils	3.62 x 10 ⁻¹¹	1.19 x 10 ⁻¹³	1.02 x 10 ⁻⁶	2.726			
RV Storage Lot (Area 2)							
Shallow Soils	6.72 x 10 ⁻¹¹	1.78 x 10 ⁻¹¹	1.71 x 10 ⁻⁶	3.013			

TABLE 4.24

COMPARISON OF SOIL TYPE FROM BORING LOGS AND SOIL TYPE DETERMINED FROM HORIZONTAL PERMEABILITY WASTE DISPOSAL, INC. SUPERFUND SITE

AREA	SOIL TYPE ALONG WELL SCREEN INTERVAL (Boring Log Observations)	HORIZONTAL PERMEABILITY (meters ²) FROM GASSOLVE MODELING PROGRAM	SOIL TYPE FROM PERMEABILITY ⁽¹⁾
Area 7-deep	Silty sand (medium to fine)	5.40E-10	Silty sand to clean sand
Area 7-shallow	Silty sand (medium to fine) and sump material at 4.5 ft.	6.27E-12	Silty sand to clean sand
Area 8-deep	Silty sand to clayey sand, and sand (medium to coarse)	3.62E-11	Silty sand to clean sand
Area 8-shallow	Silty sand (medium to fine) and sandy clay	1.34E-10	Silty sand to clean sand
Area 5-deep	Silty sand to sand (medium to fine, and well graded)	8.99E-11	Silty sand to clean sand
Area 5 -shallow	Sandy silt to sandy clay (medium to fine sand)	1.87E-08	Silty sand and clean sand
West Corner of Area 2 - deep	Sandy silt to silty sand (medium to fine), sand (medium to fine, well graded)	3.67E-11	Silty sand to clean sand
West Corner of Area 2 - shallow	Sandy silt to sandy clay (medium to fine sand)	6.69E-11	Silty sand to clean sand
RV Storage Lot - shallow	Sandy clay	6.72E-11	Silty sand to clean sand



⁽¹⁾ Data from Soil Vapor Extraction Technology, Petersens, T.A., 1991. Noyes Data Corporation, New Jersey.

TABLE 4.25

COMPARISON OF SOIL GAS LEVELS WASTE DISPOSAL, INC. SUPERFUND SITE

AREA	INITIAL PURGED CONCENTRATIONS				E SHUTDO CENTRAT		FINAL SOIL GAS RECOVERY MONITORING		
	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)	CH ₄ (%)	CO ₂ (%)	O ₂ (%)
Area 5									
• Shallow	0.2	2.7	9.3	0.0	4.9	11.6	0.0	9.2	2.3
• Deep	3.0	7.0	7.9	1.3	11.8	3.4	1.6	14.7	0.0
West Corner of Area 2									
• Shallow	0.2	5.7	13.2	0.0	0.4	20.2	0.0	7.7	3.6
• Deep	2.7	4.5	13.3	0.5	13.7	6.3	0.0	19.8	0.6
Area 7									
• Shallow	0.4	10.0	0.0	0.0	6.0	8.4	0.1	7.3	0.0
• Deep	0.0	0.0	20.9	0.0	8.5	13.0	0.6	13.7	0.0
Area 8								-	
Shallow	0.1	14.4	3.6	0.0	1.1	19.3	0.0	10.1	0.0
• Deep	0.0	0.4	20.5	0.0	12.5	7.4	0.11	5.5	9.6
RV Storage Lot (Area 2)									
• Shallow	0.0	4.6	10.1	0.0	0.0	20.7	0.0	2.2	11.4 v. 2.0 (5/4/01/rw)

ESTIMATE OF MASS REMOVAL OF METHANE, BENZENE AND VINYL CHLORIDE DURING SVE TESTING WASTE DISPOSAL, INC. SUPERFUND SITE

AREA	CONSTITUENT	AMOUNT REMOVED (lbs)
Area 7 Shallow	Methane	4.213
	Benzene	4.58E-05
	Vinyl Chloride	0
Area 7 Deep	Methane	62.591
	Benzene	9.90E-05
	Vinyl Chloride	0.0002
Area 8 Shallow	Methane	0.051
	Benzene	0
	Vinyl Chloride	0
Area 8 Deep	Methane	0.178
	Benzene	0
	Vinyl Chloride	0
Area 5 Shallow	Methane	0.145
	Benzene	0
	Vinyl Chloride	0
Area 5 Deep	Methane	977.35
	Benzene	0.0197
	Vinyl Chloride	0.0128
West Corner of Area 2 Shallow	Methane	0.832
	Benzene	0.00007
	Vinyl Chloride	0.00002
West Corner of Area 2 Deep	Methane	326.09
	Benzene	0.0148
	Vinyl Chloride	0.0082
RV Storage Lot (Area 2) Shallow	Methane	2.204
	Benzene	0.000043
	Vinyl Chloride	0.00001

See Appendix E for tables showing calculations for each area.

Theory:

- Determined the volume of gas by using the total volume removed during the test and the concentration of the gas.
- Total volume removed was calculated using the well flow rate and duration of the test.
- Used the Ideal gas law to determine the mass of the gas knowing the volume, pressure, temperature, and molar mass.
- Molar mass of methane = 16 g/mole.
- Molar mass of benzene = 78 g/mole.
- Molar mass of vinyl chloride = 62.5 g/mole

Assumptions:

- Pressure = 1 atm and the pressure remained constant for the duration of the SVE test.
- Flow rate remained constant for the duration of the SVE test.
- Gas concentration as determined by the laboratory remained constant for the duration of the SVE test.
- Temperature remained constant for duration of SVE test. If temperature was not recorded on day of test, other records were checked to see if it had been recorded for another area. If not recorded at all, used temperature from previous day or a subsequent day at similar time for the test.



TABLE 4.27

1998 EXISTING GROUND WATER MONITORING WELLS WASTE DISPOSAL, INC. SUPERFUND SITE

WELL NUMBER	TOP OF WELL CASING ELEVATION (ft above msl)	WELL TYPE	WELL SCREEN (ft bgs)	OCT. 1998 DEPTH TO WATER (ft below TOC)	LOCATION RELATIVE TO WDI WASTE SOURCES
GW - 01	153.5	Shallow	38 - 58	32.7	Upgradient
GW - 02	149.3	Shallow	33 - 53	28.6	Upgradient
GW - 03	167.5	Shallow	48 - 68	46.9	North Perimeter of Reservoir
GW - 04	166.8	Shallow	48 - 68	46.1	North Perimeter of Reservoir
GW - 05	166.7	Shallow	43 - 63	46.5	East Perimeter of Reservoir
GW - 06	158.4	Shallow	43 - 63	38.5	Underlies BWZ (East Area)
GW - 07	154.5	Shallow	38 - 58	34.8	Crossgradient to BWZ (East Area)
GW - 08	163.4	Shallow	43 - 63	46.1	West Perimeter of Reservoir
GW - 09	153.5	Shallow	38 - 58	33.4	Crossgradient to BWZ (West Area)
GW - 10	154.7	Well Cluster-Shallow	38 - 58	35.3	Crossgradient to BWZ (West Area)
GW - 11	154.7	Well Cluster-Deep	118 - 128	35.8	Crossgradient to BWZ (West Area)
GW - 13	157.5	Shallow	39 - 59	38.2	Downgradient of BWZ (West Area)
GW - 14	157.8	Shallow	38 - 58	38.4	Downgradient of Reservoir
GW - 15	163.3	Well Cluster-Shallow	48 - 68	43.7	Downgradient of Reservoir
GW - 16	163.1	Well Cluster-Interm.	74 - 79	44.0	Downgradient of Reservoir
GW - 18	159.1	Well Cluster-Interm.	69 - 74	40.3	Downgradient of Reservoir
GW - 19	158.9	Well Cluster-Shallow	39 - 59	40.0	Downgradient of Reservoir
GW - 21	155.2	Shallow	36 - 56	36.6	Downgradient of BWZ (East Area)
GW - 22	156.7	Shallow	58 - 78	47.8	Crossgradient to BWZ (West Area)
GW - 23	157.0	Well Cluster-Shallow	43 - 63	48.7	Downgradient of BWZ (West Area)
GW - 24	156.7	Well Cluster-Deep	103 - 113	48.3	Downgradient of BWZ (West Area)
GW - 26	156.0	Shallow	44 - 64	37.8	Downgradient of BWZ (East Area)
GW - 27	157.0	Shallow	43 - 63	39.0	Downgradient of BWZ (East Area)
GW - 28	157.3	Shallow	44 - 64	39.4	Downgradient of BWZ (East Area)
GW - 29	157.4	Well Cluster-Shallow	44 - 64	39.6	Downgradient of BWZ (East Area)
GW - 30	156.8	Well Cluster-Deep	74 - 94	39.4	Downgradient of BWZ (East Area)
GW - 31	167.2	Shallow	43 - 63	46.6	North Perimeter of Reservoir

ABBREVIATIONS:

bgs = below ground surface

ft = feet

msl = mean sea level

BWZ = buried waste zone (waste containment/sump areas outside of reservoir)

TOC = top of well casing

Source: CDM Federal Programs Corporation, Ground Water Data Evaluation Report, Waste Disposal, Inc. Site, January 14, 1999

TABLE 4.27A

1999 EXISTING GROUND WATER MONITORING WELLS WASTE DISPOSAL, INC. SUPERFUND SITE

 	TOD OF WEST			0.07, 1000	
WELL NUMBER	TOP OF WELL CASING ELEVATION (ft above msl)	WELL TYPE	WELL SCREEN (ft bgs)	OCT. 1998 DEPTH TO WATER (ft below TOC)	LOCATION RELATIVE TO WDI WASTE SOURCES
GW - 01	153.5	Shallow	38 - 58	36.8	Upgradient
GW - 02	149.3	Shallow	33 - 53	32.5	Upgradient
GW - 03	167.5	Shallow	48 - 68	50.8	North Perimeter of Reservoir
GW - 04	166.8	Shallow	48 - 68	50.1	North Perimeter of Reservoir
GW - 05	166.7	Shallow	43 - 63	50.3	East Perimeter of Reservoir
GW - 06	158.4	Shallow	43 - 63	42.2	Underlies BWZ (East Area)
GW - 07	154.5	Shallow	38 - 58	38.6	Crossgradient to BWZ (East Area)
GW - 08	163.4	Shallow	43 - 63	47.1	West Perimeter of Reservoir
GW - 09	153.5	Shallow	38 - 58	37.3	Crossgradient to BWZ (West Area)
GW - 10	154.7	Well Cluster-Shallow	38 - 58	39.0	Crossgradient to BWZ (West Area)
GW - 11	154.7	Well Cluster-Deep	118 - 128	39.7	Crossgradient to BWZ (West Area)
GW - 13	157.5	Shallow	39 - 59	41.9	Downgradient of BWZ (West Area)
GW - 14	157.8	Shallow	38 - 58	42.0	Downgradient of Reservoir
GW - 15	163.3	Well Cluster-Shallow	48 - 68	47.3	Downgradient of Reservoir
GW - 16	163.1	Well Cluster-Interm.	74 - 79	47.5	Downgradient of Reservoir
GW - 18	159.1	Well Cluster-Interm.	69 - 74	43.8	Downgradient of Reservoir
GW - 19	158.9	Well Cluster-Shallow	39 - 59	43.6	Downgradient of Reservoir
GW - 21	155.2	Shallow	36 - 56	40.1	Downgradient of BWZ (East Area)
GW - 22	156.7	Shallow	58 - 78	51.8	Crossgradient to BWZ (West Area)
GW - 23	157.0	Well Cluster-Shallow	43 - 63	50.4	Downgradient of BWZ (West Area)
GW - 24	156.7	Well Cluster-Deep	103 - 113	52.0	Downgradient of BWZ (West Area)
GW - 26	156.0	Shallow	44 - 64	41.1	Downgradient of BWZ (East Area)
GW - 27	157.0	Shallow	43 - 63	42.3	Downgradient of BWZ (East Area)
GW - 28	157.3	Shallow	44 - 64	42.7	Downgradient of BWZ (East Area)
GW - 29	157.4	Well Cluster-Shallow	44 - 64	42.9	Downgradient of BWZ (East Area)
GW - 30	156.8	Well Cluster-Deep	74 - 94	43.0	Downgradient of BWZ (East Area)
GW - 31	167.2	Shallow	43 - 63	50.7	North Perimeter of Reservoir

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ABBREVIATIONS:

bgs = below ground surface

ft = feet

msl = mean sea level

BWZ = buried waste zone (waste containment/sump areas outside of reservoir)

TOC = top of well casing

Source: CDM Federal Programs Corporation, Ground Water Data Evaluation Report, Waste Disposal, Inc. Site, January 14, 1999

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE

I								Page 1 of 10
WELL	İ	WELL SCREEN	GROUND SURFACE	TOP OF CASING	MEASUREMENT	DEPTH TO GROUND	WATER LEVEL	CHANGE FROM PRIOR
NO.	WELL TYPE	INTERVAL	ELEVATION	ELEVATION	DATE	WATER	ELEVATION	ELEVATION
		(ft bgs)	(ft msl)	(ft msl)		(ft bgs)	(ft msl)	(+/- feet)
GW - 01	UG - shallow	38 - 58	153.76	153.51	Nov-88	46.92	106.59	
				153.51	Dec-91	46.24	107.27	0.68
				153.51	Feb-92	45.50	108.01	0.74
l			ı	153.51	May-92	44.04	109.47	1.46
				153.51	Aug-92	43.18	110.33	0.86
				153.51	Jun-95	33.54	119.97	9.64
				153.51	Sep-95	33.30	120.21	0.24
				153.51	Sep-97	34.05	119.46	-0.75
J				153.51	Jan-98	35.26	118.25	-1.21
ļ				153.51	Арг-98	32.93	120.58	2.33
				153.51	Jul-98	32.06	121.45	0.87
				153.51	Oct-98	32.75	120.76	-0.69
				153.51	Jan-99	33.84	119.67	-1.09
				153.51	Apr-99	34.45	119.06	-0.61
				153.51	Jul-99	35.04	118.47	-0.59
				153.51	Oct-99	36.75	116.76	-1.71
GW - 02	UG - shallow	33 - 53	149.61	149.30	Nov-88	42.20	107.10	••
				149.30	Dec-91	41.76	107.54	0.44
				149.30	Feb-92	41.15	108.15	0.61
				149.30	May-92	39.74	109.56	1.41
				149.30	Aug-92	38.94	110.36	0.80
				149.30	Jun-95	29.40	119.90	9.54
				149.30	Sep-95	29.17	120.13	0.23
				149.30	Sep-97	29.96	119.34	-0.79
ł				149.30	Jan-98	30.96	118.34	-1.00
				149.30	Apr-98	28.74	120.56	2.22
				149.30	Jul-98	27.92	121.38	0.82
				149.30	Oct-98	28.61	120.69	-0.69
				149.30	Jan-99	29.59	119.71	-0.98
-				149.30	Apr-99	30.21	119.09	-0.62
				149.30	Jul-99	30.82	118.48	-0.61
				149.30	Oct-99	32.47	116.83	-1.65
GW - 03	R - shallow	48 - 68	167.76	167.51	Oct-88	61.10	106.41	
				167.51	Jan-89	61.19	106.32	-0.09
J	ļ			167.51	Dec-91	60.22	107.29	0.88
		[167.51	Sep-97	48.27	119.24	11.95
	İ			167.51	Jan-98	49.32	118.19	-1.05
				167.51	Apr-98	47.10	120.41	2.22
,				167.51	Jul-98	46.32	121.19	0.78

WATER LEVEL MEASUREMENTS AND GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 2 of 10

								Page 2 of 10
WELL	WELL TYPE	WELL SCREEN	GROUND SURFACE	TOP OF CASING	MEASUREMENT	DEPTH TO GROUND	WATER LEVEL	CHANGE FROM PRIOR
NO.		INTERVAL (ft bgs)	ELEVATION (ft msl)	ELEVATION (ft msl)	DATE	WATER (ft bgs)	ELEVATION (ft msl)	ELEVATION (+/- feet)
GW - 03	R - shallow	48 - 68	167.76	167.51	Oct-98	46.91	120.60	-0.59
(Cont'd)				167.51	Jan-99	47.92	119.59	-1.01
				167.51	Apr-99	48.58	118.93	-0.66
				167.51	Jul-99	NM	NM	
				167.51	Oct-99	50.76	116.75	
GW - 04	R - shallow	48 - 68	167.01	166.75	Oct-88	59.50	107.25	
· · · · ·			10/101	166.75	Jan-89	60.21	106.54	-0.71
				166.75	Dec-91	59.24	107.51	0.97
				166.75	Feb-92	58.72	108.03	0.52
				166.75	May-92	57.36	109.39	1.36
				166.75	Aug-92	56.50	110.25	0.86
				166.75	Jun-95	47.09	119.66	9.41
				166.75	Sep-95	46.83	119.92	0.26
				166.75	Sep-97	47.51	119.24	-0.68
				166.75	Jan-98	48.53	118.22	-1.02
				166.75	Apr-98	46.26	120.49	2.27
				166.75	Jul-98	45.52	121.23	0.74
				166.75	Oct-98	46.11	120.64	-0.59
				166.75	Jan-99	47.16	119.59	-1.05
				166.75	Apr-99	47.46	119.29	-0.3
				166.75	Jul-99	NM	NM	
				166.75	Oct-99	50.07	116.68	
GW - 05	R - shallow	43 - 63	166.92	166.67	Oct-88	59.80	106.87	
		,,,	100,72	166.67	Jan-89	60.47	106.20	-0.67
				166.67	Dec-91	59.78	106.89	0.69
	:			166.67	Sep-97	47.95	118.72	11.83
				166.67	Jan-98	48.91	117.76	-0.96
				166.67	Apr-98	46.73	119.94	2.18
				166.67	Jul-98	45.95	120.72	0.78
				166.67	Oct-98	46.53	120.14	-0.58
				166.67	Jan-99	47.55	119.12	-1.02
ł				166.67	Apr-99	48	118.67	-0.45
				166.67	Jul-99	48.83	117.84	-0.83
				166.67	Oct-99	50.3	116.37	-1.47
GW - 06	CG - shallow	43 - 63	158.63	158.38	Oct-88	51.70	106.68	••
l				158.38	Jan-89	52.34	106.04	-0.64
				158.38	Dec-91	51.60	106.78	0.74
				158.38	Sep-97	39.90	118.48	11.70

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

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WELL		WELL SCREEN	GROUND SURFACE	TOP OF CASING	MEASUREMENT	DEPTH TO GROUND	WATER LEVEL	CHANGE FROM PRIOR
NO.	WELL TYPE	INTERVAL	ELEVATION	ELEVATION	DATE	WATER	ELEVATION	ELEVATION
		(ft bgs)	(ft msl)	(ft msl)		(ft bgs)	(ft msl)	(+/- feet)
GW - 06	CG - shallow	43 - 63	158.63	158.38	Jan-98	40.68	117.70	-0.78
(Cont'd)				158.38	Apr-98	38.40	119.98	2.28
ş.				158.38	Jul-98	37.75	120.63	0.65
				158.38	Oct-98	38.46	119.92	-0.71
			158.38	Jan-99	39.34	119.04	-0.88	
				158.38	Apr-99	39.84	118.54	-0.5
				158.38	Jul-99	40.58	117.80	-0.74
				158.38	Oct-99	42.18	116.20	-1.6
GW - 07	CG - shallow	38 - 58	154.78	154.53	Oct-88	48.10	106.43	
				154.53	Jan-89	48.68	105.85	-0.58
				154.53	Dec-91	47.98	106.55	0.70
				154.53	Feb-92	47.38	107.15	0.60
				154.53	May-92	46.07	108.46	1.31
				154.53	Aug-92	45.33	109.20	0.74
				154.53	Jun-95	35.91	118.62	9.42
				154.53	Sep-95	35.78	118.75	0.13
				154.53	Sep-97	36.32	118.21	-0.54
				154.53	Jan-98	35.73	118.8	-0.85
				154.53	Apr-98	36.28	118.25	-0.55
				154.53	Jul-98	NM	NM	••
				154.53	Oct-98	38.57	115.96	
				154.53	Jan-99	35.73	118.8	-0.85
				154.53	Арг-99	36.28	118.25	-0.55
				154.53	Jul-99	NM	NM	••
				154.53	Oct-99	38.57	115.96	
GW - 08	CG - shallow	43 - 63	163.63	163.38	Oct-88	59.30	104.08	
				163.38	Jan-89	57.63	105.75	1.67
				163.38	Dec-91	56.64	106.74	0.99
				163.38	Sep-97	44.49	118.89	12.15
				163.38	Jan-98	47.63	115.75	-3.14
				163.38	Apr-98	43.50	119.88	4.13
				163.38	Jul-98	42.62	120.76	0.88
				163.38	Oct-98	46.16	117.22	-3.54
				163.38	Jan-99	44.24	119.14	1.92
ļ				163.38	Apr-99	44.85	118.53	-0.61
				163.38	Jul-99	45.42	117.96	-0.57
				163.38	Oct-99	47.05	116.33	-1.63

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

F	age	4	of	10
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WELL		WELL SCREEN	GROUND SURFACE	TOP OF CASING	MEASUREMENT	DEPTH TO GROUND	WATER LEVEL	CHANGE FROM PRIOR
NO.	WELL TYPE	INTERVAL	ELEVATION	ELEVATION	DATE	WATER	ELEVATION	ELEVATION
		(ft bgs)	(ft msl)	(ft msl)		(ft bgs)	(ft msl)	(+/- feet)
GW - 09	CG - shallow	38 - 58	153.77	153.52	Nov-88	47.50	106.02	
				153.52	Jan-89	48.14	105.38	-0.64
				153.52	Dec-91	46.98	106.54	1.16
l				153.52	Feb-92	46.36	107.16	0.62
		i		153.52	Sep-97	34.75	118.77	11.61
				153.52	Jan-98	37.97	115.55	-3.22
				153.52	Apr-98	33.85	119.67	4.12
				153.52	Jul-98	32.87	120.65	0.98
				153.52	Oct-98	33.41	120.11	-0.54
				153.52	Jan-99	34.42	119.1	-1.01
				153.52	Арг-99	35.15	118.37	-0.73
				153.52	Jul-99	35.69	117.83	-0.54
				153.52	Oct-99	37.31	116.21	-1.62
GW - 10	DG - shallow	38 - 58	154.98	154.73	Oct-88	49.30	105.43	
1				154.73	Dec-91	48.58	106.15	0.72
				154.73	Feb-92	47.94	106.79	0.64
				154.73	May-92	46.62	108.11	1.32
				154.73	Aug-92	45.83	108.90	0.79
				154.73	Jun-95	36.24	118.49	9.59
				154.73	Sep-95	35.86	118.87	0.38
				154.73	Sep-97	36.54	118.19	-0.68
				154.73	Jan-98	37.62	117.11	-1.08
				154.73	Apr-98	35.66	119.07	1.96
			i	154.73	Jul-98	34.68	120.05	0.98
				154.73	Oct-98	35.27	119.46	-0.59
				154.73	Jan-99	36.22	118.51	-0.95
				154.73	Apr-99	36.92	117.81	-0.7
				154.73	Jul-99	37.53	117.2	-0.61
				154.73	Oct-99	39.02	115.71	-1.49
GW - 11	DG - deep	118 - 128	154.91	154.66	Oct-88	49.90	104.76	
		ľ		154.66	Jan-89	49.67	104.99	0.23
				154.66	Dec-91	48.96	105.70	0.71
		ŀ	ĺ	154.66	Feb-92	48.20	106.46	0.76
		İ		154.66	May-92	46.98	107.68	1.22
]]		154.66	Aug-92	46.21	108.45	0.77
				154.66	Jun-95	36.52	118.14	9.69
j				154.66	Sep-95	36.39	118.27	0.13
i				154.66	Sep-97	37.05	117.61	-0.66
			Į.	154.66	Jan-98	38.04	116.62	-0.99

WATER LEVEL MEASUREMENTS AND GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999 WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 5 of 10

								Page 5 of 1
		WELL	GROUND	TOP OF		DEPTH TO	WATER	CHANGE FROM
WELL	WELL TYPE	SCREEN INTERVAL	SURFACE ELEVATION	CASING ELEVATION	MEASUREMENT	GROUND WATER	LEVEL ELEVATION	PRIOR ELEVATION
NO.		(ft bgs)	(ft msl)	(ft msl)	DATE	(ft bgs)	(ft msl)	(+/- feet)
GW - 11	DG - deep	118 - 128	154.91	154.66	Apr-98	37.90	116.76	0.14
(Cont'd)	•			154.66	Jul-98	35.03	119.63	2.87
				154.66	Oct-98	35.79	118.87	-0.76
				154.66	Jan-99	36.68	117.98	-0.89
				154.66	Apr-99	37.27	117.39	-0.59
!				154.66	Jul-99	NM	NM	
				154.66	Oct-99	39.73	114.93	
GW - 13	DG - shallow	39 - 59	157.77	157.52	Nov-88	51.70	105.82	
				157.52	Jan-89	52.26	105.26	-0.56
				157.52	Dec-91	51.38	106.14	0.88
				157.52	Sep-97	39.55	117.97	11.83
				157.52	Jan-98	40.61	116.91	-1.06
				157.52	Apr-98	38.72	118.80	1.89
l ,				157.52	Jul-98	37.69	119.83	1.03
1				157.52	Oct-98	38.22	119.30	-0.53
				157.52	Jan-99	39.18	118.34	-0.96
				157.52	Apr-99	39.44	118.08	-0.26
				157.52	Jul-99	NM	NM	
				157.52	Oct-99	41.90	115.62	
GW - 14	DG - shallow	38 - 58	157.92	157.76	Nov-88	51.80	105.96	
				157.76	Jan-89	52.34	105.42	-0.54
				157.76	Dec-91	51.55	106.21	0.79
				157.76	Sep-97	39.82	117.94	11.73
				157.76	Jan-98	40.80	116.96	-0.98
				157.76	Apr-98	38.98	118.78	1.82
				157.76	Jul-98	37.97	119.79	1.01
				157.76	Oct-98	38.43	119.33	-0.46
]				157.76	Jan-99	39.32	118.44	-0.89
				157.76	Apr-99	40.02	117.74	-0.7
				157.76	Jul-99	40.63	117.13	-0.61
				157.76	Oct-99	42.02	115.74	-1.39
GW - 15	DG - shallow	48 - 68	163.55	163.30	Oct-88	57.20	106.10	
				163.30	Jan-89	57.67	105.63	-0.47
				163.30	Dec-91	56.82	106.48	0.85
]]				163.30	Sep-97	44.99	118.31	11.83
			·	163.30	Jan-98	46.03	117.27	-1.04
, I				163.30	Арг-98	44.44	118.86	1.59
				163.30	Jul-98	43.06	120.24	1.38

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 6 of 10

								Page 6 of 10
,,,,,,,		WELL	GROUND	TOP OF	\	DEPTH TO	WATER	CHANGE FROM
WELL NO.	WELL TYPE	SCREEN INTERVAL	SURFACE ELEVATION	CASING ELEVATION	MEASUREMENT DATE	GROUND WATER	LEVEL ELEVATION	PRIOR ELEVATION
140.		(ft bgs)	(ft msl)	(ft msl)	DATE	(ft bgs)	(ft msl)	(+/- feet)
GW - 15	DG - shallow	48 - 68	163.55	163.30	Oct-98	43.66	119.64	-0.60
(Cont'd)				163.30	Jan-99	44.49	118.81	-0.83
				163.30	Apr-99	45.17	118.13	-0.68
				163.30	Jul-99	45.74	117.56	-0.57
				163.30	Oct-99	47.27	116.03	-1.53
GW - 16	DG -	74 - 79	163.32	163.07	Oct-88	57.30	105.77	
	intermediate			163.07	Jan-89	57.90	105.17	-0.60
				163.07	Dec-91	57.16	105.91	0.74
[163.07	Sep-97	45.33	117.74	11.83
				163.07	Jan-98	46.34	116.73	-1.01
[163.07	Арг-98	44.51	118.56	1.83
[163.07	Jul-98	43.38	119.69	1.13
[163.07	Oct-98	43.95	119.12	-0.57
'				163.07	Jan-99	44.85	118.22	-0.9
1 1				163.07	Apr-99	45.48	117.59	-0.63
				163.07	Jul-99	NM	NM	
				163.07	Oct-99	47.54	115.53	
GW - 18	DG -	69 - 74	159.34	159.10	Oct-88	55.60	103.50	
	intermediate			159.10	Dec-91	53.30	105.80	2.30
				159.10	Sep-97	41.65	117.45	11.65
				159.10	Jan-98	42.52	116.58	-0.87
]				159.10	Apr-98	40.42	118.68	2.10
				159.10	Jul-98	39.67	119.43	0.75
]				159.10	Oct-98	40.30	118.80	-0.63
				159.10	Jan-99	41.02	118.08	-0.72
				159.10	Арг-99	41.66	117.44	-0.64
				159.10	Jul-99	NM	NM	
				159.10	Oct-99	43.81	115.29	
GW - 19	DG - shallow	39 - 59	159.16	158.89	Oct-88	54.50	104.39	
[ſ			158.89	Jan-89	53.71	105.18	0.79
				158.89	Dec-91	53.15	105.74	0.56
				158.89	Sep-97	41.45	117.44	11.70
				158.89	Jan-98	42.29	116.60	-0.84
	ļ			158.89	Apr-98	40.30	118.59	1.99
				158.89	Jul-98	39.50	119.39	0.80
	ļ			158.89	Oct-98	39.99	118.90	-0.49
				158.89	Jan-99	40.90	117.99	-0.91
				158.89	Apr-99	41.38	117.51	-0.48

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 7 of 10

								Page 7 of 10
Wei		WELL SCREEN	GROUND SURFACE	TOP OF CASING	MEASUREMENT	DEPTH TO GROUND	WATER LEVEL	CHANGE FROM PRIOR
WELL NO.	WELL TYPE	INTERVAL	ELEVATION	ELEVATION	DATE	WATER	ELEVATION	ELEVATION
		(ft bgs)	(ft msl)	(ft msi)	52	(ft bgs)	(ft msl)	(+/- feet)
GW - 19	DG - shallow	39 - 59	159.16	158.89	Jul-99	42.07	116.82	-0.69
(Cont'd)				158.89	Oct-99	43.58	115.31	-1.51
GW - 21	CG - shallow	36 - 56	155.49	155.24	Oct-88	49.70	105.54	
				155.24	Dec-91	49.56	105.68	0.14
				155.24	Sep-97	37.94	117.30	11.62
				155.24	Jan-98	38.67	116.57	-0.73
				155.24	Apr-98	36.52	118.72	2.15
				155.24	Jul-98	35.91	119.33	0.61
				155.24	Oct-98	36.59	118.65	-0.68
				155.24	Jan-99	37.3	117.94	-0.71
				155.24	Apr-99	37.87	117.37	-0.57
				155.24	Jul-99	38.57	116.67	-0.7
<u> </u>				155.24	Oct-99	40.05	115.19	-1.48
GW - 22	DG - shallow	58 - 78	156.94	156.69	Oct-88	64.98	91.71	
1				156.69	Dec-91	64.54	92.15	0.44
				156.69	Sep-97	49.02	107.67	15.52
				156.69	Jan-98	50.31	106.38	-1.29
				156.69	Apr-98	49.44	107.25	0.87
				156.69	Jul-98	47.91	108.78	1.53
				156.69	Oct-98	47.82	108.87	0.09
				156.69	Jan-99	48.67	108.02	-0.85
				156.69	Apr-99	49.49	107.2	-0.82
				156.69	Jul-99	50.43	106.26	-0.94
				156.69	Oct-99	51.82	104.87	-1.39
GW - 23	DG - shallow	43 - 63	157.23	156.98	Oct-88	59.40	97.58	
l l			ĺ	156.98	Dec-91	58.58	98.40	0.82
				156.98	Feb-92	57.99	98.99	0.59
				156.98	May-92	57.64	99.34	0.35
				156.98	Aug-92	57.18	99.80	0.46
				156.98	Jun-95	48.59	108.39	8.59
				156.98	Sep-95	48.51	108.47	0.08
				156.98	Sep-97	47.80	109.18	0.71
]]			[156.98	Jan-98	49.01	107.97	-1.21
				156.98	Apr-98	48.02	108.96	0.99
		1		156.98	Jul-98	48.63	108.35	-0.61
t				156.98	Oct-98	48.67	108.31	-0.04
, 1				156.98	Jan-99	47.36	109.62	1.31
				156.98	Apr-99	48.17	108.81	-0.81

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 8 c)t	w
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								Page 8 of 1
WELL NO.	WELL TYPE	WELL SCREEN INTERVAL (ft bgs)	GROUND SURFACE ELEVATION (ft msl)	TOP OF CASING ELEVATION (ft msl)	MEASUREMENT DATE	DEPTH TO GROUND WATER (ft bgs)	WATER LEVEL ELEVATION (ft msl)	CHANGE FROM PRIOR ELEVATION (+/- feet)
GW - 23	DG - shallow	43 - 63	157.23	156.98	Jul-99	NM	NM	
(Cont'd)	:			156.98	Oct-99	50.42	106.56	
GW - 24	DG - deep	103 - 113	157.03	156.70	Oct-88	64.40	92.30	
				156.70	Dec-91	64.33	92.37	0.07
			156.70	Feb-92	63.72	92.98	0.61	
			156.70	May-92	62.51	94.19	1.21	
				156.70	Aug-92	57.00	99.70	5.51
				156.70	Jun-95	50.43	106.27	6.57
				156.70	Sep-95	49.30	107.40	1.13
				156.70	Sep-97	49.42	107.28	-0.12
	i			156.70	Jan-98	50.38	106.32	-0.96
				156.70	Apr-98	49.67	107.03	0.71
		ľ		156.70	Jul-98	48.37	108.33	1.30
				156.70	Oct-98	48.31	108.39	0.06
				156.70	Jan-99	48.93	107.77	-0.62
				156.70	Apr-99	49.72	106.98	-0.79
		,		156.70	Jul-99	50.58	106.12	-0.86
				156.70	Oct-99	52.02	104.68	-1.44
GW - 26	DG - shallow	44 - 64	156.29	156.04	Oct-88	51.40	104.64	
				156.04	Jan-89	52.41	103.63	-1.01
				156.04	Dec-91	50.60	105.44	1.81
				156.04	Feb-92	50.09	105.95	0.51
				156.04	May-92	48.88	107.16	1.21
				156.04	Aug-92	48.06	107.98	0.82
		}		156.04	Jun-95	39.07	116.97	8.99
				156.04	Sep-95	38.60	117.44	0.47
				156.04	Sep-97	39.09	116.95	-0.49
				156.04	Jan-98	40.03	116.01	-0.94
1				156.04	Арг-98	38.28	117.76	1.75
		1 3		156.04	Jul-98	37.32	118.72	0.96
				156.04	Oct-98	37.79	118.25	-0.47
				156.04	Jan-99	38.54	117.5	-0.75
				156.04	Apr-99	39.19	116.85	-0.65
				156.04	Jul-99	NM	NM	
				156.04	Oct-99	41.12	114.92	
GW - 27	DG - shallow	43 - 63	157.28	157.03	Oct-88	51.80	105.23	
				157.03	Jan-89	52.22	104.81	-0.42
				157.03	Dec-91	51.70	105.33	0.52

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

					Y		r	Page 9 of 1
WELL		WELL SCREEN	GROUND SURFACE	TOP OF CASING	MEASUREMENT	DEPTH TO GROUND	WATER LEVEL	CHANGE FROM PRIOR
NO.	WELL TYPE	INTERVAL	ELEVATION	ELEVATION	DATE	WATER	ELEVATION	ELEVATION
	_	(ft bgs)	(ft msl)	(ft msl)		(ft bgs)	(ft msl)	(+/- feet)
GW - 27	DG - shallow	43 - 63	157.28	157.03	Sep-97	40.31	116.72	11.39
(Cont'd)				157.03	Jan-98	41.19	115.84	-0.88
				157.03	Apr-98	39.46	117.57	1.73
				157.03	Jul-98	38.53	118.50	0.93
				157.03	Oct-98	39.00	118.03	-0.47
				157.03	Jan-99	39.73	117.3	-0.73
				157.03	Apr-99	40.28	116.75	-0.55
				157.03	Jul-99	NM	NM	
				157.03	Oct-99	42.26	114.77	
GW - 28	DG - shallow	44 - 64	157.56	157.31	Oct-88	53.80	103.51	••
				157.31	Jan-89	52.82	104.49	0.98
l	'			157.31	Dec-91	52.30	105.01	0.52
				157.31	Feb-92	51.81	105.50	0.49
<u> </u>				157.31	May-92	50.54	106.77	1.27
				157.31	Aug-92	49.80	107.51	0.74
				157.31	Jun-95	40.73	116.58	9.07
				157.31	Sep-95	40.36	116.95	0.37
				157.31	Sep-97	40.76	116.55	-0.40
				157.31	Jan-98	41.56	115.75	-0.80
				157.31	Apr-98	39.84	117.47	1.72
				157.31	Jul-98	38.90	118.41	0.94
				157.31	Oct-98	39.41	117.90	-0.51
				157.31	Jan-99	40.07	117.24	-0.66
				157.31	Apr-99	40.68	116.63	-0.61
				157.31	Jul-99	41.33	115.98	-0.65
				157.31	Oct-99	42.72	114.59	-1.39
GW - 29	DG - shallow	44 - 64	157.69	157.40	Oct-88	52.40	105.00	
				157.40	Dec-91	52.55	104.85	-0.15
				157.40	Sep-97	40.98	116.42	11.57
				157.40	Jan-98	41.73	115.67	-0.75
				157.40	Арг-98	40.05	117.35	1.68
				157.40	Jul-98	39.13	118.27	0.92
				157.40	Oct-98	39.63	117.77	-0.50
				157.40	Jan-99	40.29	117.11	-0.66
ľ				157.40	Apr-99	40.86	116.54	-0.57
				157.40	Jul-99	NM	NM	
				157.40	Oct-99	42.88	114.52	

WATER LEVEL MEASUREMENTS AND **GROUND WATER ELEVATIONS FROM 1988 THROUGH 1999** WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

								Page 10 of 10
WELL NO.	WELL TYPE	WELL SCREEN INTERVAL (ft bgs)	GROUND SURFACE ELEVATION (ft msl)	TOP OF CASING ELEVATION (ft msl)	MEASUREMENT DATE	DEPTH TO GROUND WATER (ft bgs)	WATER LEVEL ELEVATION (ft msl)	CHANGE FROM PRIOR ELEVATION (+/- feet)
GW - 30	DG -	74 - 94	157.01	156.80	Nov-88	55.40	101.40	
011 - 30	intermediate	/4 - /4	137.01	156.80	Dec-91	52.54	104.26	2.86
				156.80	Feb-92	51.90	104.90	0.64
				156.80	May-92	50.72	106.08	1.18
				156.80		50.00	106.80	0.72
					Aug-92			9.53
				156.80	Jun-95	40.47	116.33	ł
				156.80	Sep-95	40.34	116.46	0.13
				156.80	Sep-97	40.73	116.07	-0.39
				156.80	Jan-98	41.37	115.43	-0.64
				156.80	Apr-98	39.42	117.38	1.95
				156.80	Jul-98	38.69	118.11	0.73
				156.80	Oct-98	39.41	117.39	-0.72
				156.80	Jan-99	39.95	116.85	-0.54
				156.80	Apr-99	40.51	116.29	-0.56
				156.80	Jul-99	NM	NM	
				156.80	Oct-99	42.96	113.84	
GW - 31	R - shallow	43 - 63	167.47	167.22	Oct-88	60.00	107.22	
	j			167.22	Dec-91	59.82	107.40	0.18
				167.22	Sep-97	47.95	119.27	11.87
				167.22	Jan-98	48.96	118.26	-1.01
				167.22	Apr-98	46.74	120.48	2.22
				167.22	Jul-98	45.98	121.24	0.76
				167.22	Oct-98	46.57	120.65	-0.59
				167.22	Jan-99	47.62	119.60	-1.05
				167.22	Apr-99	48.16	119.06	-0.54
				167.22	Jul-99	NM	NM	
				167.22	Oct-99	50.65	116.57	

EXPLANATION:

1. Well types: UG = upgradient, R = edge of reservoir, CG = crossgradient to reservoir, DG = downgradient of reservoir & containment areas.

- 2. Four additional wells (GW-12, GW-17, GW-20 and GW-25) were initially proposed for the 1989 remedial investigation but were not installed.
- 3. Original well construction records mislabeled wells GW-10 and GW-11. EPAs 1992 sampling and 1997 well sounding confirm GW-10 is shallow well and GW-11 is deep well.
- = Not Applicable

NM = Not Measured

Source: CDM Federal Programs Corporation. 1999a. Ground Water Data Evaluaton Report, Waste Disposal, Inc. Site, January 14, 1999.



94-256/Rpts/RD Rev. 2.0 (5/4/01/rw)

TABLE 4.29

GROUND WATER ANALYSES AND QUALITY CONTROL OBJECTIVES WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 3

PARAMETERS	ANALYTICAL PROCEDURE (EPA METHOD NO.)	LABORATORY SPECIFIC MEASUREMENT QUALITY OBJECTIVES (MQOs)				TYPE OF		ANALYTICAL	Page 1 of
		Detection Limit (µg/L)	Accuracy ⁽¹⁾ (%)	Precision ⁽²⁾ (%)	Completeness (%)	CONTAINER	PRESERVATIVE	HOLDING TIMES	REMARKS
METALS						One 1-Liter Bottle	Acidified to pH <2	6 Months	
Aluminum	6010A	10.0	80 - 120	± 30	90	Unfiltered/One 1-Liter	with Nitric Acid	1	
 Antimony 	6010A	5.0	80 - 120	± 30	90	Bottle filtered	After Filtration		
Arsenic	7060	5.0	80 - 120	± 30	90	1 20000 1112100	711101 1 11111011	!	
Barium	6010A	10.0	80 - 120	± 30	90	i i			
Beryllium	6010A	2.0	80 - 120	± 30	90	! i			
Cadmium	6010A	5.0	80 - 120	± 30	90	1		l i	
Calcium	6010A	60.0	80 - 120	± 30	90	í i			
Cobalt	6010A	18.0	80 - 120	± 30	90	}			•
Chromium	6010A	10.0	80 - 120	± 30	90	J]	
• Iron	6010A	10.0	80 - 120	± 30	90	l i		1	
• Lead	6010A	40.0	80 - 120	± 30	90				
Magnesium	7421	3.0	80 - 120	± 30	90	, 1		1	
Manganese	6010A	30.0	80 - 120	± 30	90	ļ l		1	
Mercury	6010A	2.0	80 - 120	± 30	90	1			
Nickel	7470	3.0	80 - 120	± 30	90	į l	ı	1	
Selenium	6010A	32.0	80 - 120	± 30	90	i l			
Sodium	6010A	90.0	80 - 120	± 30	90	1			
Thallium	7740	6.0	80 - 120	± 30	90	1 1		}	
Vanadium	6010A	10.0	80 - 120	± 30	9ŏ				
• Zinc	6010A	40.0	80 - 120	± 30	90	1			
VOLATILE ORGANIC		 ''''				- · · · · · · · · · · · · · · ·		† 	
COMPOUNDS (VOCs)	1	1				Two 40 mL VOA Vials	Acidified to pH <2	14 Days	
• 1.1.1-Trichloroethane	8260A	0.5	71 - 132	± 30	90	}	with Hydrochloric		
• 1.1.2.2-Tetrachloroethane	8260A	0.5	76 - 136	± 30	90		Acid		
• 1.1.2-Trichloroethane	8260A	0.5	67 - 133	± 30	90	1			•
• 1,1-Dichloroethane	8260A	0.5	49 - 135	± 30	90	}		ļ	I
1.1-Dichloroethene	8260A	0.5	48 - 146	± 30	90	l i		ł	
1,2-Dichloroethane	8260A	0.5	68 - 129	± 30	90	1			
1,2-Dichloropropane	8260A	0.5	42 - 131	± 30	90	, ,		ł	
1,2-Dictioropropane 1.2-Dibromoethane	8260A	0.5	56 - 142	± 30 ± 30	90	1			
1,2-Dioromoethane 2-Butanone	8260A 8260A	0.5	50 - 153	± 30 ± 30	90	1			
2-Butanone 2-Chloroethyl Vinyl Ether	8260A 8260A	0.5	40 - 214	± 30	90	{		{	1
2-Unioroethyl vinyl Ether 2-Hexanone	8260A 8260A	0.5	20 - 149	± 30 ± 30	90	j l			
	8260A 8260A	0.5	40 - 125	± 30 ± 30	90	1			
4-Methyl-2pentanone Acatoma	8260A 8260A	0.5	32 - 176	± 30 ± 30	90	í í			
Acetone December	8260A 8260A	0.5	72 - 124	± 30 ± 30	90				
Benzene Benzene	8260A 8260A	0.5	69 - 132	± 30 ± 30	90	j l]	
Bromodichloromethane	8260A 8260A	0.5	53 - 148	± 30 ± 30	90				
Bromoform	8260A 8260A		55 - 146		90]			
Bromomethane		0.5		± 30	90	1		1	
Carbon Disulfide	8260A	0.5	37 - 140 70 - 140	± 30	90	1			
Carbon Tetrachloride	8260A	0.5	/0 - 140	± 30				}	
Chlorobenzene	8260A	0.5	62 127	± 30	90	1		1	
Chloroform	8260A	0.5	52 - 137	30	90]		1	
Chloroethane	8260A	0.5	77 - 128	± 30	90	\			
Chloromethane	8260A	0.5	37 - 129	± 30	90	1		1	
 cis-1,2-Dichloroethene 	8260A	0.5		± 30	90	Į l		1	
 cis-1,3-Dichloropropene 	8260A	0.5	66 - 129	± 30	90			1	
 Dibromochloromethane 	8260A	0.5	ĺ	± 30	90	(ľ	
Ethylbenzene	8260A	0.5]	± 30	90	1		Į.	
Methylene Chloride	8260A	0.5	51 - 139	± 30	90	Į l			

Based on Matrix Spike Percent Recovery.
 Based on Duplicate Samples.

GROUND WATER ANALYSES AND QUALITY CONTROL OBJECTIVES WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 3

PARAMETERS	ANALYTICAL PROCEDURE (EPA METHOD NO.)	LABORATORY SPECIFIC MEASUREMENT QUALITY OBJECTIVES (MQOs)				TYPE OF		ANALYTICAL	
		Detection Limit (µg/L)	Accuracy ⁽¹⁾ (%)	Precision ⁽²⁾ (%)	Completeness (%)	CONTAINER	PRESERVATIVE	HOLDING TIMES	REMARKS
VOLATILE ORGANIC	8260A	0.5		± 30	90				
COMPOUNDS (VOCs)	8260A	0.5		± 30	90		i		
(Continued)	8260A	0.5	67 - 145	± 30	90	į.	ľ	ľ	
m-p-xylene	8260A	0.5	48 - 134	± 30	90	1		1	
• o-xylene	8260A	0.5	66 - 130	± 30	90	i	ŀ		
 Styrene 	8260A	0.5	71 - 135	± 30	90	(į į	
Toluene	8260A	0.5	24 - 143	± 30	90	i		1	
Tetrachloroethene	8260A	0.5	48 - 140	± 30	90				
 trans-1.2-Dichloroethee 	8260A	0.5		± 30	90	1		[
 trans-1,3-Dichloropropene 	8260A	0.5		± 30	90	i	ŀ		
Trichloroethene	<u> </u>	J					J	ļ	
Vinyl Acetate		[i		l 1	
Vinyl Chloride									
SVOCs		 				l-Liter	None.	7 Days to	
Acenaphthene	8270	5.0	51 - 126	± 30	90	Amber Glass Bottle	Cool to 4° C.	Extract.	
Acenaphylene	8270	5.0	56 - 131	± 30	90	with Teflon®	1	40 Days after	
Anthracene	8270	5.0	54 - 117	± 30	90	Seal.	ľ	Extraction	
Benzo(a)anthracene	8270	5.0	55 - 132	± 30	90				
Benzo(b)fluoranthene	8270	5.0	43 - 135	± 30	90	ì		ì	
Benzo(k)fluoranthene	8270	5.0	57 - 137	± 30	90				
Benzo(g,h,i)perylene	8270	5.0	36 - 157	± 30	90	1		,	
Benzo(a)pyrene	8270	5.0	51 - 141	± 30	90	i		Ì	
bis(2-Chloroethyl)ether	8270	5.0	48 - 117	± 30	90				
• bis(2-Chloroisopropyl)ether	8270	5.0	39 - 155	± 30	90	1		1	
bis(2-Ethylhexyl)phthalate	8270	5.0	15 - 176	± 30	90	i	ĺ	i i	
4-Bromophenyl-phenylether	8270	5.0	43 - 142	± 30	90				
Butylbenzylphthalate	8270	5.0	50 - 139	± 30	90		!		
4-Chloroaniline	8270	5.0	46 - 126	± 30	90		l		
4-Chloro-3-methylphenol	8270	5.0	49 - 133	± 30	90		!		
2-Chloronaphthalene	8270	5.0	36 - 97	± 30	90]	}]]	ı
4-Chlorophenyl-phenylether	8270	5.0	49 - 134	± 30	90				
• Chrysene	8270	5.0	55 - 134	± 30	90		1		
Dibenz(a,h)anthracene	8270	5.0	41 - 144	± 30	90		}	1	
Dibenz(a,h)acridine	8270	5.0	(3)	± 30) śŏ			'	
Dibenzofuran	8270	5.0	53 - 129	± 30	90	1			
Di-n-butylphthalate	8270	5.0	50 - 129	± 30	90	}	ł	}	
• 1.2-Dichlorobenzene	8270	5.0	30 - 120	± 30	90	1	1		
1,3-Dichlorobenzene	8270	5.0	28 - 114	± 30	90				
• 1.4-Dichlorobenzene	8270	5.0	28 - 116	± 30	90	l	{	}	
3.3-Dichlorobenzidine	8270	5.0	1 - 262	± 30	90.		İ		
• 2,4-Dichlorophenol	8270	5.0	43 - 124	± 30	90				
Dimethylphthalate	8270	5.0	55 - 134	± 30	90	1	į .	į į	
4,6-Dinitro-2-methylphenol	8270 8270	25	38 - 147	± 30	90			1	
	8270 8270	25	36 - 147 22 - 174	± 30 ± 30	90		I	1	
• 2,4-Dinitrophenol	8270 8270	5.0	51 - 146	± 30	90	ĺ	1	1 1	
• 2,4-Dinitrotoluene	8270 8270	5.0	*				1		
2,6-Dinitrotoluene			53 - 129	± 30	90				
Di-n-octylphthalate Fluoranthene	8270 8270	5.0	41 - 145 52 - 128	± 30 ± 30	90 90	(1	1	

Based on Matrix Spike Percent Recovery.
 Based on Duplicate Samples.
 Insufficient spike data for setting accuracy limits.

TABLE 4.29

GROUND WATER ANALYSES AND QUALITY CONTROL OBJECTIVES WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

	ANALYTICAL	MEAS		ORY SPECIFIC LITY OBJECTIVES	(MQOs)	TYPE OF		ANALYTICAL	
PARAMETERS	PROCEDURE (EPA METHOD NO.)	Detection Limit (µg/L)	Accuracy ⁽¹⁾ (%)	Precision ⁽²⁾ (%)	Completeness (%)	CONTAINER	PRESERVATIVE	HOLDING TIMES	REMARKS
SVOCs (Continued)									
• Fluorene	8270	5.0	55 - 126	± 30	90	ł		l	
 Indeno(1,2,3-ad)pyrene 	8270	5.0	30 - 172	± 30	90	l			
 Isophorone 	8270	5.0	39 - 126	± 30	90	ł		l i	
2-Methylnaphthalene	8270	5.0	36 - 124	± 30	90	ł			
2-Methylphenol	8270	5.0	36 - 116	± 30	90	ŀ			
4-Methylphenol	8270	10.0	46 - 109	± 30	90			1	
2-Nitroaniline	8270	5.0	54 - 133	± 30	90	F			
4-Nitroaniline	8270	5.0	40 - 166	± 30	90	Į			
2-Nitrophenol	8270	5.0	43 - 122	± 30	90	ł			
N-Nitrosophenylamine	8270	5.0	(5)	± 30	90	Į.			
 N-Nitroso-di-n-propylanime 	8270	5.0	32 - 136	± 30	90	}	ļ	1	1
Naphthalene	8270	5.0	40 - 110	± 30	90				
Nitrobenzene	8270	5.0	44 - 118	± 30	90	į			
Pentachlorophenol	8270	10.0	26 - 158	± 30	90	Ļ		i	
Phenanthrene	8270	5.0	54 - 128	± 30	90			l i	
• Phenol	8270	5.0	28 - 91	± 30	90	ł			
Pyrene	8270	5.0	53 - 128	± 30	90	1	ł	l i	
1,2,4-Trichlorobenzene	8270	5.0	30 - 121	± 30	90				
• 2,4,5-Trichlorophenoi	8270	5.0	49 - 143	± 30	90	ļ	ļ	Į.	
• 2,4,6-Trichlorophenol	8270	5.0	50 - 134	± 30	90				
PESTICIDES/PCBs(6)	- 5270	 				1 Liter	None.	14 Days to	
• 4.4'-DDD	8080	0.03	68 - 146	± 30	90	Amber Glass Bottle	Cool to 4° C.	Extract.	
• 4.4'-DDE	8080	0.03	71 - 136	± 30	90	With Teflon Seam	C00110 4 C.	40 Days after	
• 4.4'-DDT	8080	0.03	64 - 142	± 30	90	with retion Seam		Extraction.	
• 4,4-001 • Aldrin	8080	0.03	65 - 132	± 30	90	ļ	ļ	Extraction.	
	8080	0.03	71 - 132	± 30 ± 30	90				
Alpha-BHC DIG	8080	0.03	72 - 139		90	Į	ļ		
Beta-BHC Date BHC	8080 8080	0.03	72 - 139 75 - 134	± 30	90				
Delta-BHC	8080 8080	0.03	73 - 134 73 - 136	± 30 ± 30	90	!	1		
Gamma-BHC						i			
Chlordane	8080	0.03	(5)	± 30	90	1	J]	
Dieldrin	8080	0.03	73 - 134	± 30	90	l			
Endosulfan I	8080	0.03	45 - 127	± 30	90	}	j]	
Endosulfan II	8080	0.03	50 - 126	± 30	90	l			
Endosulfan Sulfate	8080	0.03	51 - 163	± 30	90	j.	J]	
• Endrin	8080	0.03	63 - 150	± 30	90	[l		
Endrin Aldehyde	8080	0.03	70 - 136	± 30	90	j	J]	
Endrin Ketone	8080	0.03	(6)	± 30	90	[ł]	
Heptachlor	8080	0.03	62 - 144	± 30	90	J	J]	
 Heptachlorepoxide 	8080	0.03	74 - 134	± 30	90	}		Į į	
Methoxychlor	8080	0.03	47 - 147	± 30	90	I	ļ]	
Toxaphene	8080	1.0	(5)	± 30	90	Ì]		
• PCBs	8080	0.50	54 - 146	± 30	90	I	ĺ	l	

94-256/Rpts/RcDeInSuRe Rev. 1 (8/4/99/ey)

Based on Matrix Spike Percent Recovery.
 Based on Duplicate Samples.
 Insufficient spike data for setting accuracy limits.
 Ground water samples will not be analyzed for pesticides/PCBs.
 Multiple peak chromatograms inhibit setting accuracy limits.
 Insufficient spike data available to set accuracy limits.

TABLE 4.30 SUMMARY OF TREND DATA FOR SELECTED GROUND WATER WELLS FOR TCE. PCE. BENZENE AND TOLUENE WASTE DISPOSAL, INC. SUPERFUND SITE

Well Number	Well Location	Constituents(1)	1988		1992		19	95	19	97 ⁽²⁾		19	98			1	999	
			Nov	Feb	May	Aug	June	Sep	Sep	Sep	1 stQ	2ndQ	3rdQ	4thQ	1 stQ	2ndQ	3rdQ	4th(
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
CIV AI	Shallow	Tetrachloroethene (PCE)	ND	ND	ND	ND	13.0	11.0	6.0	6.6	5.9	5.6	6.0	ND	3.2	ND	2.8	2.
GW-01	Upgradient	Toluene	ND	ND	ND	ND	3.0	ND	3.0	ND	ND	ND	ND	ND	ND	ND	ND	NI
		Trichloroethene (TCE)	ND	ND	ND	ND	ND	ND	2.0	2.7	ND	ND	ND	ND	ND	ND	ND	N
		Benzene	1															
an. 44(1)	Deep	PCE								1 -							1	
GW-32 ⁽³⁾	Upgradient	Toluene																
		TCE																
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		N
	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	<u> </u>	ND		N
GW-07	Upgradient	Toluene	1.0	ND	ND	ND	ND	ND	7.0	ND	ND	ND	ND	ND		ND		N
		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		N
		Benzene	ND	ИD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	<u> </u>	N
	Deep	PCE	11.0	ND	8.0	17.0	ND	2.9	30.0	40.0	74.0	77.0	86.0	91.0		88.0		12
GW-11	1 - 1 - 1	Toluene	ND	ND	ND	ND	3.7	ND	1.0	ND	ND	ND	ND	ND		ND		N
	ļ	TCE	ND	ND	ND	ND	ND	ND	4.0	4.6	6.8	7.6	9.5	9.2		11.0		14
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
CIV 22	Shallow	PCE	ND	ND	ND	ND	ND	ND	3.0	4.3	5.3	5.1	4.3	2.6	4.2	3.6	2.9	N
GW-22	Cross-gradient	Toluene	5.0	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	N
		TCE	ND	ND	ND	ND	ND	ND	2.0	3.3	ND	ND	2.3	2.6	2.2	ND	ND	N
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		N
GW-23	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	0.56	ND	ND	ND	ND		ND		N
GW-23	Cross-gradient	Toluene	ND	ND	ND	ND	2.6	ND	2.0	ND	ND	ND	ND	ND		ND		N
	1	TCE	ND	ND	ND	ND	ND	ND	ND	0.65	ND	ND	ND	ND		ND		N
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		N
CIV A	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		N
GW-26		Toluene	4.0	ND	ND	ND	1.8	ND	2.0	ND	ND	ND	ND	ND		ND	t	N
		TCE	18.0	8.0	7.0	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		N
		Benzene	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
C111 - C	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
GW-28	Downgradient	Toluene	ND	ND	ND	ND	9.4	ND	8.0	ND	ND	ND	ND	ND	ND	ND	ND	N
		TCE	ND	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
		Benzene	1				i	 			1	\vdash				1		
	Shallow	PCE	† —	\vdash				—		t —				†		1		
GW-33 ⁽¹⁾		Toluene	T					 		<u> </u>		 		1				\vdash
	1	TCE	† –		\vdash		l —	<u> </u>	1	1 -	!	 	1		 	 	1	

⁽¹⁾ Concentrations of constituents were measured in micrograms per liter (µg/L).

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Numbers represent concentrations above the laboratory's reporting detection limit.

Bold number show concentrations that exceeded the MCL (i.e., TCE = 5 μ g/L; PCE = 5 μ g/L and toluene = 150 μ g/L).

Shaded area indicates that data is not available as the wells had not been installed.

⁽²⁾ Data was collected in September 1997 by the EPA and WDIG. The first September column is the EPA's data and the second column is the WDIG's data.

⁽³⁾ Proposed monitoring wells.

TABLE 5.1

SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR SOIL MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE

						Page 1 of 3
SITE MEDIA	1971 TO 1987 INVESTIGATIVE ACTIVITIES	1988 TO 1989 RI INVESTIGATIVE ACTIVITIES	1995 WDIG PREDESIGN	1997 TO 1998 EPA RD INVESTIGATIVE ACTIVITIES	1997 TO 1998 WDIG RD INVESTIGATIVE ACTIVITIES	1999 TO 2001 WDIG RD INVESTIGATIVE ACTIVITIES
Soil	 AFE, 1971 Preliminary Foundation Investigation (12707 East Los Nietos Road): 0 to 3 feet: clayey silt (fill material). 3 to 15 feet: silty clay with fine sand. 15 to 20 feet: sand. HSE, 1975 Fill Investigation and Preliminary Soils Study (12707 East Los Nietos Road): 0 to 7.5 feet: Mottled sandy silt and clay (fill material) (North). 0 to 8.5 feet: Mottled sandy silt and clay (fill material) (Center). 0 to 1.5 feet: Mottled sandy silt and clay (fill material) (South). 7.5 to 10 feet: Clay silt to silty clay. Moore & Tabor, 1981 Foundation investigation (northeast corner of Los Nietos Road and Greenleaf Avenue): 0 to 5 feet: Silty sand to sandy silt intermixed with trash and debris (fill material). 5 to 15 feet: Debris mixed with bentonite (buried waste). 5 to 16 feet: Silty sand and clayey and sandy silt (alluvial deposits). Dames & Moore, 1984 Site investigation for soil conditions: 0 to 9 feet: fill material. 9 to 23.5 feet: clay with silt and sand. STLC exceedances of barium, cadmium, copper, lead, mercury, nickel, silver, vanadium and zinc were observed in soil samples collected from four borings. 	 One hundred eight (108) soil borings were drilled to 35 feet at specified locations around the site: Reservoir: 0 to 15 feet: Artificial fill (soil and debris). Varied from 5 to 15 feet thick across reservoir. Drilling muds and crude extend beyond to bottom of reservoir (18 to 23 feet total depth). Area 1: 0 to 5 feet: Fill material and asphalt (thin near border). 5 to 20 feet: Interbedded clays with silt and sand. Waste is encountered at depths varying from 10 to 25 feet bgs along the eastern boundary of area. Area 2: Fill material: Eastern side: 0 to 10 feet Northeast corner: 10 to 15 feet Southern border: 0 to 10 feet Buried waste: Northwest corner: Maximum depth 20 to 25 feet. Intermixed with sludge and free liquids at depth of 7 to 10 feet bgs. Northeast corner: Ranges from 5 to 20 feet bgs. Northerst corner: Ranges from 5 to 20 feet bgs. Northern portion of reservoir the waste materials are not extensive. Seven borings were drilled through berm. Clay layers underlain by sand were encountered. 	 Area 4: Sixteen (16) shallow borings and six deep hollow-stem auger borings: Material types: - Fill material - Buried waste - Native soil Five (5) to 15 feet of fill material consisting of silty sand with miscellaneous construction debris. Buried waste consisting of sand and silt and saturated with oily substances. Located in central portion of area. Greatest depth was 35 feet bgs. Native material silt or poorly graded sand with silt. Thallium and beryllium were COCs which exceeded ROD standards. Area 7: - Thirteen (13) shallow borings and one (1) deep hollow-stem auger borings: - Encounter similar materials as Area 4. Chromium and arsenic exceedances in the buried waste. Thallium and beryllium exceedances with ROD standards. 	 Area 7 Geoprobe Characterization: Fill material appears to be underlain by a natural, undisturbed, fine, well-sorted sand or, in some places, possibly a silt. Areas of stained soil containing oily liquids. Extent of soil staining is on the order of 200,000 cubic feet (ft³). Volume of soil containing liquids is approximately 50,000 ft³. Reservoir Physical Characteristics: Geophysical Survey (Dipole-Dipole Resistivity and Terrain Conductivity): Dipole-Dipole Resistivity and Terrain Conductivity: Anomaly 1 represents the reservoir edge and dry berm material. Anomaly 2 includes most of the remaining material, both inside and outside of the reservoir. Anomaly 3 includes a small area of high resistivity values, close to the surface and outside of the reservoir. Spectrum, the ERT contractor that performed the geophysical survey, attributes the anomaly to high resistivity hydrocarbon sludge or hydrocarbon saturated soils. 	 Geoprobe Investigation: Volume of waste material inside the central reservoir is calculated to be approximately 148,000 cubic yards (yd³). Volume of buried waste outside the reservoir is calculated to be approximately 243,047 yd³. Soil chemistry data include the following: Area Inside the Reservoir: Most constituents for the buried waste are below cleanup standards. Exceptions are one exceedance of arsenic and chromium and PCE at 12-foot depths. Constituents for the overlying fill material generally are less than the cleanup criteria. Concentrations of arsenic and chromium at a depth of 3.8 feet are slightly above the cleanup standards. Area Outside the Reservoir: Buried waste was observed at most of Area 2, along the inside perimeters of Areas 4, 5 and 7. Thickness of buried waste is approximately 3- to 12-foot. Some thicker zones exist in Areas 4 and 5. Soil Chemistry Data Results Overlying Fill Concentrations of organic constituents are below PRGs. Concentrations of metals are below PRGs, with the exception of: One occurrence of arsenic, chromium and lead. 	TM No. 13 - Pilot Scale Treatability Study for Reservoir Liquids Removal: Sandy silt to sandy clay 5 to 12 feet thick. Buried waste is approximately 8- to 15 feet thick inside the reservoir. TM No. 14 - Supplemental Subsurface Investigation: Buried waste underlies 11 buildings or structures. Estimated volume of buried waste in Areas 1 and 8 is 35,900 cubic yards. Thickness of the fill soil ranged from 1 to 14 feet. Buried waste ranged from 0.5 to 14.5 feet thick. Maximum depth of buried waste was 20 feet. COCs in fill material did not exceed the 1994 WDI ROD standards and/or the EPA's Preliminary Remediation Goals (PRGs) for industrial soil. Buried waste exceeded ROD standards for arsenic in IDP-14-10. Native soils exceed ROD standards and/or PRGs for arsenic in IDP-2-20; for chromium in DP-4-6; and for toxaphene in IDP-2-20.

SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR SOIL MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

SITE MEDIA	1971 TO 1987 INVESTIGATIVE ACTIVITIES	1988 TO 1989 RI INVESTIGATIVE ACTIVITIES	1995 WDIG PREDESIGN	1997 TO 1998 EPA RD INVESTIGATIVE ACTIVITIES	1997 TO 1998 WDIG RD INVESTIGATIVE ACTIVITIES	1999 TO 2001 WDIG RD INVESTIGATIVE ACTIVITIES
Soil (Continued)	Dames & Moore, 1985		WDIG PREDESIGN			wdig RD investigative activities
Soil (Continued)	 Phase II Remedial Investigation: Thirty-five soil samples from WDI site, St. Paul's High School athletic field and vacant lot: Loose sand, fine gravel fragments, concrete and plant matter in subsurface samples. STLC exceedance of lead in five samples. However, similar to background concentrations. Barium, copper and vanadium below STLC. No detectable concentrations of priority pollutants in surface samples. Logs for MWs: MW-1: 0 to 2 feet: fill material. 2 to 14 feet: black oily sludge (buried waste). 14 to 22 feet sand and clay with trace of silt. 22 to 40 feet fine- to medium-grained sand. 40 to 75 feet: sand and clayey silt. MW-2: 0 to 25 feet: Silty clay. 25 to 77 feet: Sand and gravel with silty clayey and clayey silt layer intermixed (33 to 52 feet). MW-3: 0 to 9 feet: Fill material. 9 to 23 feet: Clayey silt to silty clay. 23 to 74 feet: Sand intermixed with silty clay. 23 to 74 feet: Sand intermixed with silty clay. 25 to 78 feet: Sand intermixed with silty clay (33 to 38 feet). Dames & Moore, 1986 (Toxo Spray Dust, Inc.) Site investigation: Soil samples indicated DDT and other pesticides. Dames & Moore, 1986 (Campbell Property [Area 7]) Soil physical characteristics: Levels of naphthalene, din-butyl phthalate, 2-methyl-naphthalene, fluorene, phenanthrene, ethyl benzene were detected at various depths. pH ranged from 7.9 to 8.4. Metals were below TTLC and STLC. CPT soundings showed soft buried waste extending 100' x 175' x 10'. Greatest depths of buried waste was 18 feet. 	 Area 3: No soil borings. Area 4: Four borings within the area: 5 to 10 feet of fill material. Buried waste encountered below fill material extending 20 feet bgs. Clay layer with sand 21 to 25 feet. Border of Area: 0 to 5 feet: Fill material. 5 to 10 feet of fill material. 5 to 10 feet: Stiff clay. 10 to 25 feet: Silt, clay and sand. No contamination. Rectangular shape of waste area. Area 5: 0 to 5 feet: Fill material. 5 to 20 feet: Silty clay to clay. 20 to 35 feet: Sand. No visible contamination. Area 6: 0 to 5 feet: Fill material. 5 to 20 feet: Gray clay with some silt. 20 to 35 feet: Native clay layer. No visible contamination. Area 7: Within the area: 0 to 5 feet: Fill material. 5 to 20 feet: Buried waste. >20 feet: Native fine- to medium-grained sand with no visible contamination. Border of Area: 0 to 5 feet: Fill material. 5 to 20 feet: Native silty, clay layer. >20 feet: Native silty, clay layer. >20 feet: Fine- to medium-grained sand. Area 8: Northern portion of area: 0 to 5 feet: Fill material. 7 to 10 feet: Buried waste. 10 to 50 feet: Clay. New site perimeter. 0 to 20 feet: Clay. >20 feet: Clay silt and sand. No visible contamination. 		 Terrain Conductivity Results: Terrain conductivity surveys provide two types of measurements. The in-phase results were successful in generally locating the berm and edges of the reservoir. Diameter of the reservoir as determined by the geophysical methods is about 25 feet less than determined from maps and drawings of the site. In some portions of the circular anomaly marking the general edge of the reservoir, the data contour lines are less dense. These may be areas where the berm has been breached or is partially missing. Contents (Physical) Characterization: Reservoir fill material includes silt, drilling mud, concrete, brick and wood. Structural Characteristics: Reservoir Measurements: Concrete liner varies from 3 inches to 4 inches in thickness and has a 1/4-inch reinforcement wire mesh through the middle of the liner. Liner walls slope toward the center at an angle of 27 degrees as measured in the field. Concrete liner has been measured by geophysical methods to be 575 feet in diameter, but was probably at least originally 600 feet in diameter before the top of the cement wall was broken down several feet for filling and surface grading. During intrusive activities, a berm width of 40 feet was measured at a depth of 6 feet. Measured thickness of the clay berm is approximately 22 feet. Berm is composed of fine, reddish-brown clay. 	 Buried Waste Concentrations of organic constituents are below PRGs with the exception of vinyl chloride, TCE, PCE, and benzene. Concentrations of metals are generally below PRGs, with the exception of arsenic, chromium and lead in one boring. Underlying Soils Concentrations of metals and organics below PRGs for native soil samples. One exception is an occurrence of arsenic at 20 percent above the PRG at a depth of 18 feet. TM No. 10 - Additional Soil Sampling and Leachability Testing: Based on the total VOC data, the following conclusions can be made: Fill Samples: VOCs would be below TCLP and MCL limits. Buried Waste Samples: VOCs would be below TCLP limits for the constituents with the exception of vinyl chloride in one sample. This sample had a high detection limit (1 to 2 milligrams per kilogram [mg/kg]) for vinyl chloride; however, the result does not necessarily mean that vinyl chloride is present. One exceedance of the STLC for lead was observed. The sample contained 5.07 mg/L lead compared to the STLC limit of 5.0 mg/L. Deionized leaching results confirmed that the potential for leaching under rain infiltration conditions is very low, and below the TCLP acid extraction levels. Based on the information presented above, the materials tested appear to be classified as nonhazardous for disposal purposes. 	

SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR SOIL MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

SITE MEDIA	1971 TO 1987 INVESTIGATIVE ACTIVITIES	1988 TO 1989 RI INVESTIGATIVE ACTIVITIES	1995 WDIG PREDESIGN	1997 TO 1998 EPA RD INVESTIGATIVE ACTIVITIES	1997 TO 1998 WDIG RD INVESTIGATIVE ACTIVITIES	1999 TO 2001 WDIG RD INVESTIGATIVE ACTIVITIES
Soils (Continued)	John L. Hunter & Associates, 1987 Campbell property (Area 7) investigation following unauthorized discharge of plating solutions. Metal concentrations below TTLC, with the exception of one exceedance of nickel. STLC exceedances of chromium, nickel, copper, zinc, arsenic, cadmium and lead. Nitrate: 9 to 3,990 ppm. pH: 5.6 to 7.9.	 Area 1 had exceedances of the PRGs for arsenic, benzo(a)pyrene, beryllium and lead. Area 2 had exceedances of the PRGs for PCBs, arsenic, benzene, benzo(a)pyrene, beryllium, chrysene, lead, tetrachlorethene, vinyl chloride, and xylenes (total). Area 3 had exceedance of PRG for arsenic. Area 4 had exceedances of the PRGs for anthracene, arsenic, benzene, beryllium, chrysene, and zinc. Area 5 had exceedance of PRG for arsenic. Area 6 had exceedance of PRG for arsenic. Area 7 had exceedance of the PRGs for PCBs, arsenic, benzo(a)pyrene and bis(2-ethylhexyl)phthalate. Area 8 had exceedance of the PRGs for arsenic, beryllium and lead. Baseball field had exceedance of PRG for arsenic. 		 Current depth of the reservoir is believed to be approximately 14 feet below ground surface (bgs) on the eastern side and 12 feet bgs on the western side, relative to the existing ground surface. Reservoir Observations: At the 12:00 o'clock location, the concrete wall was found to be missing to an unknown depth. The excavated material contained a considerable amount of very large rocks and concrete blocks. The clayey berm (mixed of red and gray clay) surrounding the outer boundary of the reservoir was compromised, revealing a heterogeneous material, and dark staining to 7 feet beyond (away from) the reservoir wall. At the 1:00 o'clock location, the concrete wall was cleanly cut (vertically). An apparent "makeshift" wall of large rocks and concrete debris was set back away from the reservoir, approximately 2 feet from where the existing evidence of dark staining 7 feet beyond the concrete wall toward the St. Paul School's athletic field, to a depth of approximately 8 feet. At the 3:00 o'clock location, the reservoir wall was encountered at approximately 6 feet bgs, and revealed several vertical and horizontal fractures. Piezometer Study: Buried waste consists of fill soil (silt), construction debris (cement, bricks, wood, muds and oily-wastes). 	TM Nos. 6, 8 and 12 Reservoir Liquids Testing: • Silty sand to sandy silt 9 to 10 feet thick. • Buried waste is approximately 5 to 10 feet thick below the fill material.	



SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR SOIL GAS AND IN-BUSINESS AIR MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE

	1	1000 70 1000	1005	1007 75 1005	1000 00 1000	Page 1 of 2
SITE MEDIA	1971 TO 1987 INVESTIGATIVE ACTIVITIES	1988 TO 1989 RI INVESTIGATIVE ACTIVITIES	1995 WDIG PREDESIGN	1997 TO 1998 EPA RD INVESTIGATIVE ACTIVITIES	1997 TO 1998 WDIG RD INVESTIGATIVE ACTIVITIES	1999 TO 2001 RD INVESTIGATIVE ACTIVITIES
Soil Gas and In-Business Air	AFE, 1971 N/A HSE, 1975 N/A Moore & Tabor, 1981 N/A Dames & Moore, 1984 N/A Dames & Moore, 1985 N/A Dames & Moore, 1986d (Toxo Spray Dust, Inc.) Methane results of 23.1 percent (231,000 ppm) and 597 ppm of total nonmethane hydrocarbon as hexane were observed in one sample. Dames & Moore, 1986a (Campbell Property [Area 7]) Gas samples indicated methane concentrations ranging from 9,500 ppm to 11,200 ppm. Total nonmethane hydrocarbon as hexane was detected in one well at 29 ppm. Samples were collected from three shallow probes (5 to 6 feet). John L. Hunter & Assoc., 1987 N/A	Subsurface gas investigation was performed by converting 26 soil borings into subsurface gas monitoring wells. A total of 28 subsurface gas samples were analyzed for basic gases and trace contaminants: Results indicate that there are large variations in the trace organic gases distributed across the site and to some extent the ratio of major gases identified as well. Chloroform, trichloroethane, trichloroethene, tetrachloroethene, benzene, methane, trichloroethene and perchloroethene were detected. Analytical results also identified the presence of vinyl chloride ranging from 73 to 110 ppbv adjacent to and within the reservoir about 180 feet west of the reservoir. Detection frequency of these gases range from approximately 4 percent to 100 percent. Tetrachloroethene is the most prevalent organic gas present in the subsurface media at the WDI site. Trichloroethene has the highest average concentration among the detected compounds and vinyl chlorine shows the highest concentration of the compounds but it was detected in only three wells.	Soil gas measurements were performed in the available site vapor wells in June 1995: Results of the screening and analysis indicate generally low levels of methane (e.g., generally less than 5 percent) and low concentrations of VOCs (e.g., generally less than 1 ppm). The results are summarized by site area below: Area 2 - Soil gas concentrations ranging from 0.3 to 9.34 percent methane with VOCs ranging from nondetect to less than 1.4 ppm. Subsurface gas measurements conducted during the RI indicated concentrations ranging from 0.0 to 39.18 percent methane with VOCs ranging from 0.003 to 16 ppm. Area 4 - Soil gas concentrations of methane and VOCs were not detected. Area 7 - Soil gas concentrations ranging from 0.0 percent to a single well with 18.5 percent methane and VOCs ranging from nondetect to less than 1 ppm concentrations. Other Site Areas - Soil gas concentrations concentrations ranging from 0.0 to 4.0 percent methane and VOCs ranging from 0.0 to 4.0 percent methane and VOCs ranging from nondetect to 5.2 ppm.	Chemical Characterization of the Reservoir: Results of the reservoir chemical characterization indicated the following conditions: Elevated levels of the following VOCs were observed in the vapor phase: Benzene Toluene Xylene Ethylbenzene Elevated methane levels in the southwest quadrant of the reservoir. Low levels of chlorinated solvent, degradation products and vinyl chloride in some areas of the reservoir. Benzene detected in all samples except piezometer P-3. Toluene, ethylbenzene and xylene were detected in all samples. High Vacuum Extraction: Principal conclusions drawn from this pilot test are as follows: Yield of combustible vapors was substantially less than the fuel requirement of the engine. Highest yield over a 24-hour period was 50,415 BTU/hr compared to a fuel demand of 360,000 BTU/hr. Also, there were extended periods with no measurable fuel being extracted. The rate of biologically produced methane from this site is substantially less than the unit consumes. This technology is not cost effective for recovering energy or liquids from the reservoir. Poor performance is due to the limited rate at which methane is generated and the low permeability of the material.	TM No. 6, 8 and 12 Additional Reservoir Liquids Investigation: VOCs detected from EX-2 include vinyl chloride, Benzene, TCE, toluene, and xylene. Annual Soil Gas Monitoring Results: As part of the Soil Gas Monitoring program, WDIG and EPA have installed an additional 37 multilevel probes at the site. Annual Soil Gas Monitoring has indicated elevated level of VOCs and methane in the following areas, in excess of the ITSLs: Reservoir Northwest Corner of Area 2 (RV lot) Adjacent to 12673B Los Nietos Road (Area 2) 9843 Greenleaf Avenue (Area 5) West of 12673B Los Nietos Road (Area 1) Northeastern Portion of Area 8 Area 8 near the auto storage yard Southwest Portion of Area 8 - Central Portion of Area 7 Primary VOCs in excess of the ITSLs include: Methane Benzene Vinyl chloride TCE PCE Other VOCs have been detected as discussed in the RD Investigative Activities Summary Report but are below correct action levels. Data demonstrates that at the perimeter, and near most structures methane levels are below the CIWMB standard of 5 percent. Methane levels adjacent to 9843 Greenleaf Avenue and 12673B Los Nietos Road are above the 1.25 percent level. Annual In-Business Air Monitoring Results WDIG has completed over seven rounds of In-Business Air Monitoring at six onsite businesses. In-business monitoring has shown no evidence of soil gas migration into onsite business, which is consistent with EPA's conclusions presented in Report Subsurface Gas Contingency Plan. Constituents identified in in-business air samples are consistent with Business air samples are consistent with business air samples are consistent with Business air samples are consistent with Business air samples are consistent with Business air samples are consistent with Business air samples are consistent with Business air samples are consistent with Business air samples are consistent with Business air samples are consistent with Business activities, which include the use of solvent and petroleum fuels. TM No. 9A - Soil Gas Testing	Annual In-Business Air Monitoring Results: WDIG has completed 14 rounds of In-business air monitoring at six onsite businesses. In-business monitoring has shown no evidence of soil gas migration into onsite business, which is consistent with EPA's conclusions presented in the Subsurface Gas Contingency Plan. Constituents identified in in-business air samples are consistent with business activities, which include the use of solvent and petroleum fuels. Annual Soil Gas Monitoring Results: WDIG has completed 13 rounds of vapor well monitoring at the vapor well network. Annual soil gas monitoring has indicated elevated levels of VOC and methane in the following areas, in excess of the ITSLs: Reservoir Northwest Corner of Area 2 Adjacent to 12673B Los Nietos Road (Area 2) West of 12673B Los Nietos Road (Area 1) 9843 Greenleaf Avenue (Area 5) Northeastern Portion of Area 8 Area 8 near the auto storage yard Southwest Portion of Area 7 Primary VOCs in excess of the ITSLs include: Methane Benzene Vinyl Chloride TCE PCE Other VOCs have been detected as discussed in the RD Investigative Activities Summary Report but are below correct action levels. Data demonstrates that at the perimeter, and near most structures methane levels are below the CIWMB standard of 5 percent. Methane levels adjacent to 9843 Greanleaf Avenue, 12673B Los Nietos Road, 9620 Santa Fe Springs Road and 12803 Los Nietos Road are above the 1.25 percent level.

N/A = Findings are not applicable to media.

SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR SOIL GAS AND IN-BUSINESS AIR MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 2 of 2 1971 TO 1987 INVESTIGATIVE ACTIVITIES 1995 WDIG PREDESIGN 1988 TO 1989 1997 TO 1998 1997 TO 1998 1999 TO 2001 SITE MEDIA RI INVESTIGATIVE ACTIVITIES EPA RD INVESTIGATIVE ACTIVITIES WDIG RD INVESTIGATIVE ACTIVITIES **RD INVESTIGATIVE ACTIVITIES** It can be concluded that the Soil Gas: Treatability results indicated the following: Soil Gas and In-Business Air reservoir is the most contaminated (Continued) Comparison of the ITSLs with soil gas SVE zone of influence ranged from 30 to up source containing high concentrations for VOCs and methane show to 50 feet in the fill soils, and 120 to 200 concentrations of metals and that ITSLs have been exceeded at several feet on the deep zone. volatile organics. However, most locations at the site. VOCs were detected of the contamination appears to be Constituents extracted were primarily above soil gas ITSLs in ten wells and methane, benzene, vinyl chlorine, TCE and confined within the concrete-lined 11 temporary probes. Methane was above the 5 percent ITSL in five vapor wells and area. Although the concrete bottom may not to be intact in 26 probes. Post-treatment monitoring of the SVE areas several areas, the contamination has indicated some rebound in methane levels in Benzene was the VOC most frequently not spread downward to ground localized hot spots such as in Area 5 and reported above its soil gas ITSL water. Ground water under at the 12673B Los Nietos Road (Area 2). (nine probes/seven wells), followed by site is relatively free of vinyl chloride (five probes/nine wells), Overall observations: Low gas generation rate contamination. Certain areas used chloroform (two probes/two wells), was observed consistent with the known site previously as waste handling areas tetrachloroethene (PCE) (two probes, one conditions and soil vapor monitoring activities: also contain elevated levels of well), and 1,2-dibromoethane contamination. These areas are not SVE was found to be effective in reducing (one probe/two wells). Vinvl chloride and lined and therefore, waste presence soil gas levels. Benzene were the only VOCs detected above and migration in the subsurface Very low levels of soil gases were extracted ITSLs in the vapor wells in both the may be considered as a potential from the fill soils. September 1997 and August 1998 health hazard in these areas. In deep soils, SVE reduced the soil gas levels sampling events. The site boundary ITSL However, for the most part, soil significantly and created a large zone of for PCE of 190 parts per billion per contamination in these areas volume (ppbv) was exceeded at gas probe GP-31 (PCE = 532 ppbv). This is the appears to be bound to the soils and Soil gas rebound was consistent with previous is relatively immobile. Subsurface gas generation calculations. only location ITSLs were exceeded along gas presence in this area may also the site boundaries. pose a health hazard and its To determine whether methane or VOCs remediation may be needed. from soil gas have migrated into the buildings onsite, in-business air samples were collected inside the 24 occupied structures on the site. Methane was not detected above 50 parts per million (ppm) (0.005 percent) inside the buildings. More than 25 VOCs were detected above background concentrations in the in-business air samples. Benzene was the chemical detected above ITSLs most frequently. The presence of Benzene, toluene and xylene may be because of the use of petroleum products such as gasoline or motor oil by the businesses onsite. Many of the businesses at the site repair automobiles and store gas cans within the buildings. The presence of trichloroethene (TCE), PCE and vinyl chloride in the buildings may be because of the use of solvents and manufacturing processes. Vinyl chloride was detected once at the building at 12635 Los Nietos Road. Vinyl chloride was not detected in the duplicate sample at this location. Based on the partial well network established by the WDIG, EPA determined that ten building locations met the requirement for permanent monitoring points between the buried waste and the building. Four vapor well monitoring locations (VW-55, -57, -58 and -61) exceeded soil gas ITSL criteria for at least one COC. None of the other VOCs detected exceeded threshold levels.

94-256/RPTS/SFS Rev 2 0 (5/4/01/mc

TABLE 5.3
SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR GROUND WATER MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE

SITE MEDIA	1971 TO 1987	1988 TO 1989	1995	1997 TO 1998	1997 TO 1998	1999 TO 2001
	INVESTIGATIVE ACTIVITIES	EPA RI ACTIVITIES	WDIG PREDESIGN	EPA RD INVESTIGATIVE ACTIVITIES	WDIG RD INVESTIGATIVE ACTIVITIES	WDIG RD INVESTIGATIVE ACTIVITIES
Ground Water	AFE, 1971 • N/A HSE, 1975 • N/A Moore & Tabor, 1981 • N/A Dames & Moore, 1984 • N/A Dames & Moore, 1985 • Encountered ground water at 52.5 feet, 80.5 feet and 50.5 feet. • Water samples did not contain detectable concentrations of either CAM metals or EPA priority pollutants. • MW-3 contains 12 ppb of chlordane, which exceeded the DHS level for drinking water (0.55 ppb). Dames & Moore, 1986 (Toxo Spray Dust, Inc.) • N/A Dames & Moore, 1986 (Campbell Property [Area 7]) • N/A John L. Hunter & Assoc., 1987 • N/A	 Twenty-seven of the soil borings were converted into ground water monitoring wells to determine the extent of ground water contamination. In general, ground water has been encountered at a depth of 46 to 65 feet bgs. Accordingly, ground water is approximately 34 to 44 feet below the bottom of the WDI reservoir and 22 to 47 feet below the bottom of the WDI waste handling areas. Ground water elevations indicate that ground water flow is generally in a southwest direction. According to the data, near the Campbell property (Area 7) and the Dia-Log property, the flow is slightly to the south and west. Samples of ground water were collected from GW-01 and-02, upgradient of the reservoir. Aluminum and selenium were found in both of these wells in concentrations above the Safe Drinking Water Act (SDWA) and Primary Maximum Contaminant Level (PMCL), standards. Concentrations of iron and manganese in these wells also exceed the Secondary Maximum Contaminant Levels (SMCL). Chromium was detected in concentrations above the MCL standard in GW-01. Arsenic, barium, copper, lead and zinc were found in both upgradient wells but at concentrations lower than the MCL standards. Calcium, magnesium, potassium and sodium were also found in both wells. Concentrations of cobalt, nickel, and vanadium were also detected. Volatile organics, semivolatile organics and pesticides/PCB compounds were not detected in these upgradient wells. 	Data indicates an average increase in elevation of 12.68 feet over the period of October 1988 to June 1995, with the highest changes occurring between late 1991 to the present. Results of the September 1995 sample round indicated that the rising ground water elevation trend has been slowed significantly, as is expected given the WRD activities. Based on this investigation, it does not appear that the ground level conditions will cause site conditions to impact ground water conditions.	The following conclusions were based on the results and evaluation of ground water, waste source characterization and monitoring completed at WDI during the period October 1988 through April 1998 by CDM Federal: 1997 water level monitoring indicates ground water occurs at depths ranging from 30 to 48 feet bgs (approximately 22 feet below the base elevation of the buried concrete reservoir). The upper water-bearing zone (estimated to be 100 feet or greater in thickness) consists primarily of interbedded and interconnected sandy alluvial deposits without laterally extensive confining beds. The overall direction of ground water flow is towards the south-southeast with a very low horizontal hydraulic gradient (average 0.004 feet/foot). The WDI site contains a variety of liquid and solid wastes, many of which are hazardous substances, including petroleum and petroleum-related chemicals, solvents, acetylene sludge, drilling muds and construction debris (WDI wastes). WDI wastes occur both within and outside of the buried concrete reservoir that was originally used for petroleum storage. Outside of the reservoir, WDI wastes were disposed in unlined excavated sumps and waste pits. Soil boring investigations have confirmed that the interval of buried wastes occurs over areas outside of the concrete reservoir (depths generally between 5 and 25 feet bgs).	 Several site COCs (VOCs and metals) have been detected above their respective MCLs in the ground water samples. However, these exceedances do not appear to be related to site wastes based on their distribution in ground water (e.g., some contaminants are detected upgradient or cross-gradient from WDI waste sources). VOCs detected in ground water samples are primarily PCE and TCE, with concentrations generally less than 20 µg/L. PCE and TCE concentrations in several locations are above their respective MCL of 5 µg/L for primary drinking water. These VOCs have been detected in the western part of the site in both upgradient and deep monitoring wells. Based on ground water flow conditions, the distributions of detection, and information for offsite ground water contamination sites, the sources of PCE and TCE detected in the western portion of the site appears to be from solvent releases associated with upgradient industrial sites. Toluene has been detected sporadically by EPA (maximum concentration was 64 µg/L which is below its MCL [150 µg/L]) in ground water sampled adjacent to and downgradient of WDI waste sources. WDIG has not detected toluene in the ground water since February 1998. CDM Federal concludes in their Ground Water Data Evaluation Report that significant impact on ground water has not been identified from the WDI site, based on available sampling results and the location and characteristics of the waste sources at the site. WDIG generally concurs with this conclusion since data collected by WDIG from September 1997 through October 1998 are consistent with those of CDM Federal. 	 Two ground water wells (GW-32 and GW-33) were installed January 2001. 2001 First Quarter analytical results did not show VOC concentrations for either GW-32 or GW-33.

N/A - Findings are not applicable to media.

SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR GROUND WATER MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE

(Ćontinued)

Page 2 of 4 1997 TO 1998 EPA RD INVESTIGATIVE ACTIVITIES 1995 WDIG PREDESIGN 1999 TO 2001 1971 TO 1987 1988 TO 1989 1997 TO 1998 SITE MEDIA INVESTIGATIVE ACTIVITIES WDIG RD INVESTIGATIVE ACTIVITIES **EPA RI ACTIVITIES** WDIG RD INVESTIGATIVE ACTIVITIES Ground Water (Continued) Numerous metals were detected in - The primary contaminants at WDI which have the samples collected from ground potential to cause ground water impact include the water monitoring wells located wastes buried within the concrete reservoir, the buried within the WDI site boundaries. waste materials disposed outside of the reservoir, and The following discussion the soil gas. Hazardous constituents detected in WDI summarizes the significance of waste include benzene, toluene, ethylbenzene, and xylene (BTEX); solvents, primarily TCE, PCE and associated degradation products (e.g., VC); semivolatile organic compounds (SVOCs); heavy these results: - Aluminum was detected in 25 of 27 ground water monitoring metals (arsenic, chromium, copper, lead), and PCBs. wells. Twenty-three wells show Elevated levels of soil gas are present in the aluminum concentrations above subsurface (vadose zone) outside of the reservoir in the MCL of 1,000 ppb many areas of the site. Soil gas hot spots are established by the SDWA. characterized by elevated levels of BTEX, Methane, Aluminum was also detected in petroleum hydrocarbon vapor and chlorinated VOCs. the upgradient wells. No significant impacts from WDI wastes on ground Arsenic, barium, copper, lead, water quality have been identified based on the mercury, silver and zinc were available ground water sampling results and the found in more than one well but comparison of sampling results with the location and at concentrations below the characteristics of the waste sources at the site. Several MCLs. site COCs (VOCs and metals) have been detected Calcium was found in all wells. above their respective State drinking water maximum Concentration of calcium ranges contaminant levels (MCLs) in ground water samples. from 187 to 354 ppm. The However, these exceedances do not appear to be related highest concentration was found to site wastes based on their distribution in ground in GW-01 which is an upgradient water (e.g., some contaminants are detected upgradient or laterally away from WDI waste sources). Chromium was detected in The primary VOCs detected in ground water samples 19 wells but GW-01 which is an are TCE and PCE, generally at concentrations less upgradient well and GW-27 than 10 micrograms per liter (µg/L). During 1997 to located near the southern end of 1998 sampling, PCE was detected at five monitoring the site contain concentrations wells at concentrations above its MCL of 5 µg/L above the MCL standard. (maximum 77 µg/L, well GW-11). TCE was detected Cobalt was found in wells in ground water above its MCL of 5 µg/L during GW-01 (49 ppb), GW-09 1998 sampling at one monitoring well (GW-11, (21 ppb) and GW-23 (16 ppb). 7.6 µg/L). PCE and TCE have been detected in the Iron was detected in 26 wells. western part of the site in both upgradient and deep Concentration of iron exceeds the monitoring wells. Based on ground water flow MCL standard in 24 of these conditions, the distribution of detections and wells. The range of iron information on offsite ground water contamination concentration is from 221 to sites, the source of the PCE and TCE detected in the 79,300 ppb. The highest iron monitoring wells in the western portion of the WDI concentration was found in site appears to be from solvent releases associated GW-01, an upgradient well. with upgradient chemical or industrial sites. Magnesium was found in all wells. Concentration of magnesium ranges from 59 to 114 ppm. Magnesium was detected in both upgradient and downgradient from the site. Nickel was found in 11 wells. The nickel concentration ranges from 24 ppb to 79 ppb. The highest concentration was found in GW-01, an upgradient well.

TABLE 5.3

SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR GROUND WATER MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

Page 3 of 4 1997 TO 1998 EPA RD INVESTIGATIVE ACTIVITIES 1988 TO 1989 1995 WDIG PREDESIGN 1997 TO 1998 WDIG RD INVESTIGATIVE ACTIVITIES 1971 TO 1987 1999 TO 2001 SITE MEDIA INVESTIGATIVE ACTIVITIES WDIG RD INVESTIGATIVE ACTIVITIES **EPA RI ACTIVITIES** - Concentrations of manganese - Toluene has been detected sporadically in ground water Ground Water (Continued) were detected at all wells sampled at monitoring wells adjacent to and downgradient of WDI sources (maximum including the two upgradient wells, GW-01 and GW-02. concentration 64 µg/L, which is below the MCL for Concentrations above the MCL toluene). Toluene is considered a useful indicator standard were found in 24 wells. chemical for ground water monitoring based on the Manganese concentrations ranged from 20 to 5,850 ppb. The solubility characteristics of this compound and the fact that it is also present in WDI buried waste and highest concentrations of manganese were found in GW-13, -14, -15 and -21 with soil gas. There appears to be no light nonaqueous phase liquid (LNAPL) or dense nonaqueous phase liquid (DNAPL) concentrations between 4,010 to sources contributing to ground water contamination 5,850 ppb. The first three of beneath the site since high concentrations those wells are located (e.g., greater than 1,000 µg/L) of dissolved solvents or BTEX and evidence of oily sheen or floating downgradient of the reservoir Potassium was detected in all hydrocarbons have not been observed in the ground wells. The concentration of water sampling conducted at the WDI site. potassium ranges from 5,240 to 18,400 ppb. The highest - Ground water sampling at the WDI site has not shown a consistent distribution or detection of the primary concentration was detected at metals (arsenic, chromium, copper, lead) which are GW-01, an upgradient well. present at elevated concentrations in WDI wastes. - Concentrations of selenium were Concentrations of these metals are generally very low detected in 26 wells. Twenty-five and only isolated sampling rounds have exceeded the (25) wells had concentrations MCLs. Evidence of migration or impact to ground above the MCL. The highest water from metals in WDI waste has not been concentration of selenium was observed in the ground water sampling data. detected in GW-01, an upgradient - Elevated concentrations of aluminum, iron, manganese and selenium have been detected in ground - Sodium was detected in all wells. water samples, in local cases, above primary or Sodium concentration ranges from 102 to 190 ppm. The secondary drinking water standards. The fact that these metals are detected uniformly across the site (locally at average sodium concentration for higher concentrations in upgradient wells) suggests the two upgradient wells is that the elevated concentrations reflect a regional water approximately 140 ppm. quality condition and are not related to WDI Vanadium was detected in ten onsite sources. monitoring wells. The highest concentration of vanadium was found in GW-01, an upgradient Five volatile organic compounds were detected in WDI ground water. However, most concentrations of the contaminants are much lower than MCLs and DHS action levels. Trichloroethene is the VOC found in a concentration (18 ppb) above the MCL standard (5 ppb) in well GW-26. Acetone, a common laboratory contaminant, was found in GW-30. Concentrations of toluene (1-5 ppb) were detected in nine wells. Tetrachloroethene was found in GW-11 and -21. Chloroform was found in GW-06

TABLE 5.3 SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2001 FOR GROUND WATER MEDIA WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

SITE MEDIA

1971-TO 1987

1988 TO 1989

1995

EPA RI ACTIVITIES

Four semivolatile organic
compounds were detected in WDI
ground water. Bis (2-chlorechty)
the twas detected at four well
this compound ranged from
260 pp to 650 pp to
1995

A concentration of 36 pp di
dichylphhalate was detected at
GW-07. The three phhalate (2 pp)
were
found in GW-07 and GW-31. A
concentration of 199 pb of
GW-07. The three phhalate (2 pp)
were
found in GW-07 and GW-31. A
concentration of pp po of
Di-n-but/phhalate (2 pp)
were
found in GW-07 and GW-31. A
concentration of
Di-n-but/phhalate (2 pp)
were
found in GW-07 and GW-31. A
concentration of
Di-n-but/phhalate
compounds are common
lab contaminants.

Pesticides and PC-Bs were not
present in detectable concentrations
in WDI ground water samples.

94-256/RPTS/SFS Rev 2.0 (5/4/01/rw)

SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2000 FOR LIQUIDS LOCATED WITHIN AND OUTSIDE THE RESERVOIR BOUNDARY WASTE DISPOSAL, INC. SUPERFUND SITE

SITE MEDIA	1971 TO 1987	1988 TO 1989	1995	1997 TO 1998	1997 TO 1998	1999 TO 2000
	INVESTIGATIVE ACTIVITIES	EPA RI ACTIVITIES	WDIG PREDESIGN	EPA RD INVESTIGATIVE ACTIVITIES	WDIG RD INVESTIGATIVE ACTIVITIES	WDIG RD INVESTIGATIVE ACTIVITIES
Liquids located within and outside the reservoir boundary.	AFE, 1971 N/A NSE, 1975 N/A Moore & Tabor, 1981 N/A Dames & Moore, 1984 N/A Dames & Moore, 1985 MW-2 was originally abandoned at 15 feet. Waste material and free liquids were encountered at the original location. Dames & Moore, 1986 (Toxo Spray Dust, Inc.) N/A Dames & Moore, 1986 (Campbell Property [Area 7]) N/A John L. Hunter & Assoc., 1987 N/A	Thirty-seven borings were drilled in areas where contaminated liquids were suspected of being deposited in unlined sumps: • Area 2 free liquids were observed 7 to 10 feet bgs.		 Area 7 Geoprobe Characterization Liquid volume is approximately 18,700 gallons. Approximately 1.900 gallons may be recoverable. Reservoir Physical Characterization: Contents (Physical) Characterization: Piezometers depict the distribution of the liquids within the reservoir, however the phase (nonaqueous/aqueous) thickness data should be taken as an estimate of true thickness. Liquid levels were encountered at varying depths ranging from 4 to 12.5 feet bgs. Piezometer Study: The following observations and conclusions were made by CDM Federal based on the information collected during the investigation: Fifty-two of the 60 boreholes exhibited liquids in the soil cores. Over time (24 hours) all of the probes exhibited liquids. Liquid levels ranged from surface to approximately 6 to 8 feet bgs. In some locations the liquids appear to be perched on top of the waste materials, and at other locations the liquids appears to extend near to the bottom of the reservoir. The distribution of liquids appears to reflect the manner in which wastes were disposed of in the reservoir. Waste disposal occurred over several years, apparently in batches of varying materials. Some of the materials appear to be drilling muds, whereas other materials appears to be construction debris. Some materials appears to contain oil. The observed liquid levels are not indicative of the actual level found within the reservoir nor the volume of liquids. Results of this investigation indicated that liquids are probably associated with thin seams and discrete zones of limited permeability within the wastes. Although perched liquids were encountered at some locations, liquids were observed throughout the waste mass. 	Chemistry of Perched Water Observations: Perched water was sampled and analyzed for VOCs at TS-137 and -141. Additional analysis were not performed due to a limited volume of samples collected. Analyses of the water from these locations do not show detectable concentrations of VOCs. In October 1997, VW-09 was sampled for liquids and pumped to determine the recharge potential. Sampling of VW-09 liquids indicated the following constituents: VOCs Benzene, ethylbenzene, toluene, -methyl-2-pentanone and vinyl chloride at low levels. SVOCs Naphthalene and 2-methyl-naphthalene. PCBs Low levels of PCBs were detected, e.g., <0.5 ppm. Metals Low levels of arsenic, barium, cadmium, chromium, lead and nickel were detected. Pump testing indicated the well recharged to within 80 percent of the original level within 24 hours. Liquid levels were monitored in the reservoir from November 1997 to February 1998. During this period, liquid levels rose significantly because of unprecedented rainfall caused by the global weather pattern known as "El Niño." There is an anomalous drop in water level at Well P-1, the reason is not apparent. Results of the initial TM No. 6 activities indicated the liquids extracted during the pump test were being yielded by the overlying fill soils and not the underlying, relatively impermeable waste material. Fluid conductivity testing indicated conduction in the fill on the order of 10-7. Although the fluid conductivity appears low in comparison to the TM No. 6 results, it appears that the majority of the flow comes from between the fill and buried waste. Additional activities consisted of two pump tests to help verify this hypothesis. Liquids recovery tests were also performed as outlined in TM No. 12. The tests consisted of purging sixty-two 1-inch piezometers installed by EPA, noted above, and monitoring the recovery rates of the liquids. Data collected during the TM No. 12 recovery testing was used for the following: Characterize the recharge rates of the reservoir liquids. Determi	 Pilot Scale Treatability Study for reservoir liquids removal began May 26, 1999 and ended June 1, 2000. Approximately 129,350 gallons of water were extracted and treated. Approximately 800 gallons of oily liquid were recovered. Removal of liquids is feasible. However, pump rates and liquid recovery rates decreased significantly in the extraction wells over time making the process cost-prohibitive (i.e., start-up extraction rate - 120 gallons per hour (gph) ending extraction rate - 2 gph).

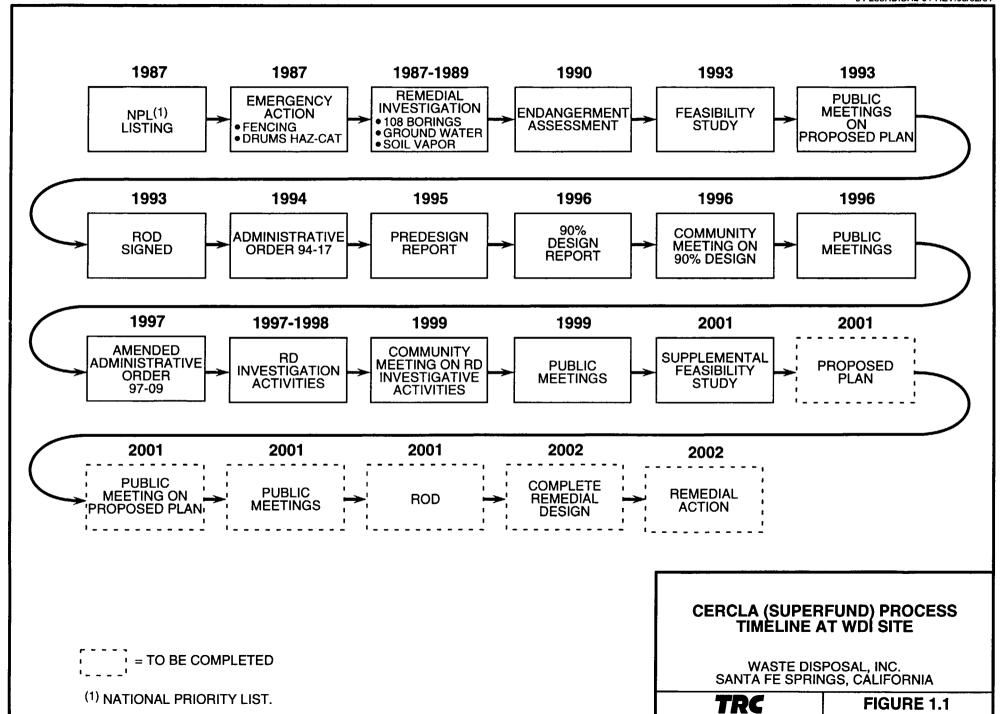
N/A - Findings are not applicable to media.

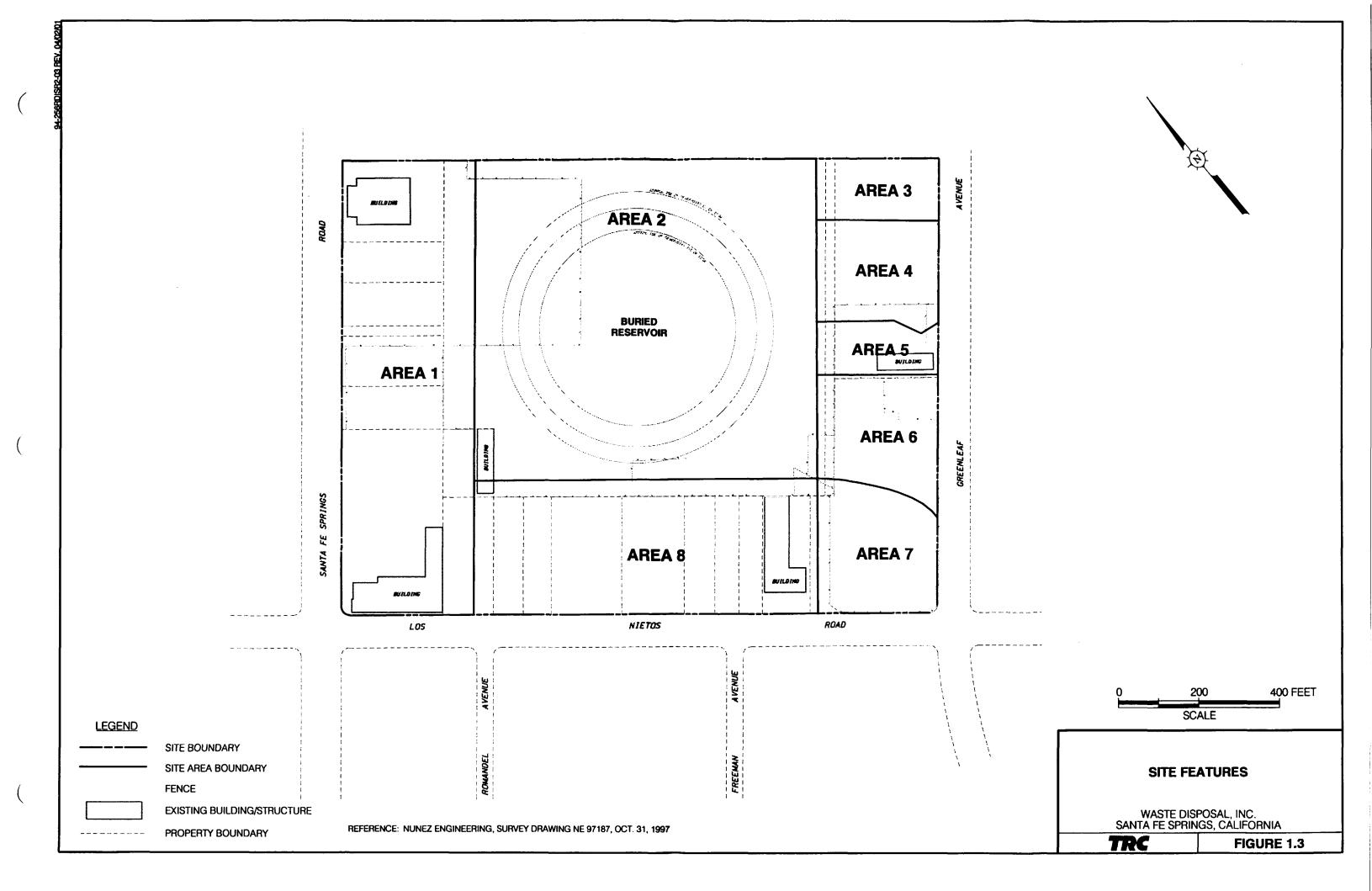
SUMMARY OF FINDINGS FOR SITE INVESTIGATIONS FROM 1971 TO 2000 FOR LIQUIDS LOCATED WITHIN AND OUTSIDE THE RESERVOIR BOUNDARY WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

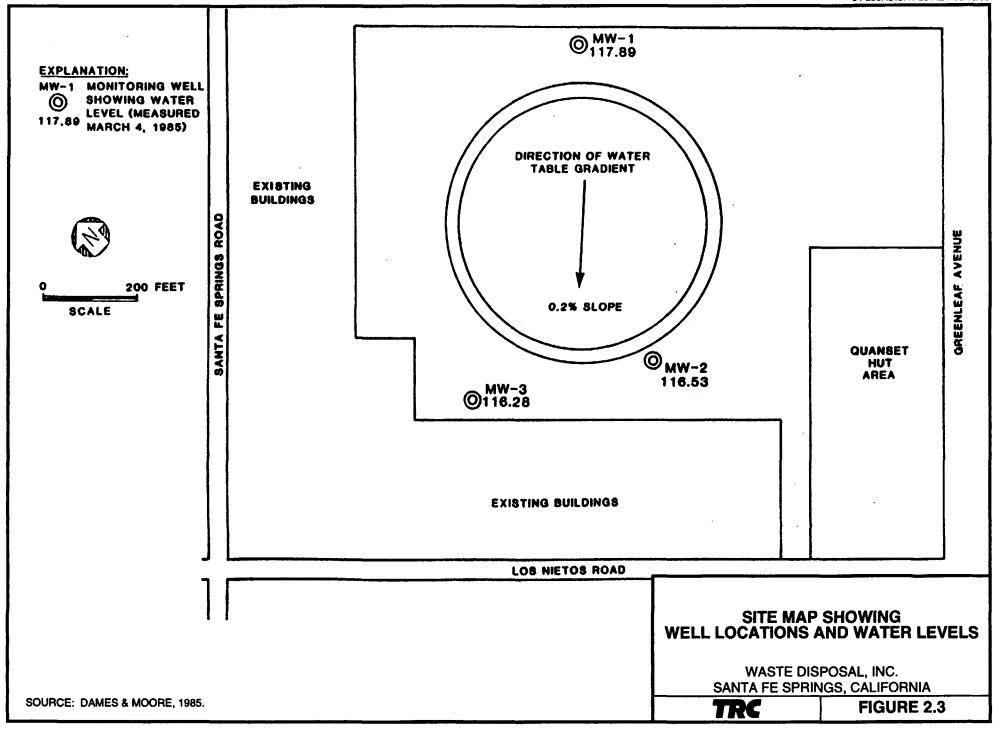
SITE MEDIA	1971 TO 1987 INVESTIGATIVE ACTIVITIES	1988 TO 1989 EPA RI ACTIVITIES	1995 WDIG PREDESIGN	1997 TO 1998 EPA RD INVESTIGATIVE ACTIVITIES	1997 TO 1998 WDIG RD INVESTIGATIVE ACTIVITIES	1999 TO 2000 WDIG RD INVESTIGATIVE ACTIVITIES
quids located within and outside the servoir boundary. (ontinued)				The principal conclusions drawn from this pilot test are as follows: The objective of developing EX-1 as a free flowing well was not achieved; however, the test did demonstrate that fluid could be drawn into the well under vacuum and that it would return to the formation when the vacuum was released. This confirms the screen and gravel pack were not impeding flow. The sustained rate of liquid extraction achieved from extraction well EX-2 averaged 4.93 gallons/hr during the first 5 days and 2.42 gallons/hr during the next 11 days. This compares to a yield of 3 gallons/hr as obtained by the WDIG using a 24-hour short-term cycle pumping test. Considering that the reservoir contains a fixed volume of fluid and the limited zone of influence, the yield is expected to decrease as liquid is removed by each test. Applying the vacuum appears to enhance the rate of liquid recovery and may increase the total volume recovered from a given well. The influence of the vacuum on liquid levels in the surrounding monitoring wells and piezometers displayed anisotropic conditions with no consistent correlation of drawdown versus distance. This technology is not cost-effective for recovering energy or liquids from the reservoir. The poor performance is due to the limited rate at which methane is generated and the low permeability of the material.	 Observations and analytical data collected during trenching and TM Nos. 6, 8 and 12 activities showed the following characteristics of the materials encountered within the reservoir: Reservoir liquids consist of infiltrated rainwater and light crude oil. Fill material consists of an extremely heterogeneous silty sand to sandy silt layer intermixed with wood and concrete debris. Waste material consists of black stained clays (drilling muds) with zones of liquid and/or product. Hydraulic characteristics of liquids within reservoir boundary are extremely heterogeneous. Areas of higher permeability lenses which contain liquids were observed in both the fill and sump material. Chemical characteristics of liquids do not indicate the liquids are a hazardous material. Observations made during trenching and additional TM No. 6 and 12 activities support the hypothesis that liquids within the fill and buried waste are contained within higher permeability lenses. These pockets are not interconnected and locations are not well defined throughout the reservoir. Twenty-two wells were installed by WDIG to demonstrate whether the liquids in the reservoir could be effectively extracted by pumping activities. The data generated from these wells indicated the following: Three of the six extraction wells were dry (EX-1, -3 and -5). This is possibly because of the undefined areas of higher permeable lenses. Liquid levels appear to be related to the diameter of the wells. The levels are influenced by: (1) low permeability of the fill and waste material; (2) limited volume of liquids; and (3) differences in void space determined by the diameter of the boring. Low hydraulic yields of the material. Sustainable short-term yields ranged from 0.001 gpm to 0.050 gpm. The yields would be expected to decrease over time because of the limited zone of influence and volume of free-liquids contained in the higher permeability lenses. Limite	











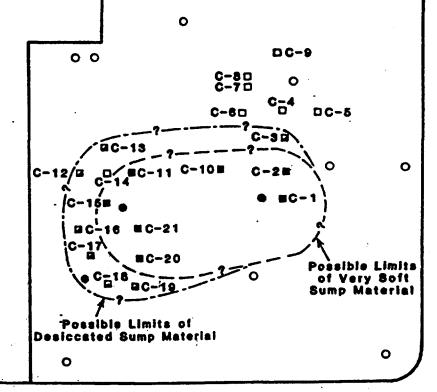
TRC

FIGURE 2.4

SOURCE: DAMES & MOORE, 1986a.

EXPLANATION

- BORING WHICH ENCOUNTERED SUMP MATERIAL
- O BORING WHICH DID NOT ENCOUNTER SUMP MATERIAL
- SUGGESTIVE OF VERY SOFT"SUMP MATERIAL
- E CPT SOUNDING SUGGESTIVE OF DESICCATED SUMP MATERIAL
- CPT SOUNDING SUGGESTIVE OF ABSENCE OF SUMP MATERIAL





80 100

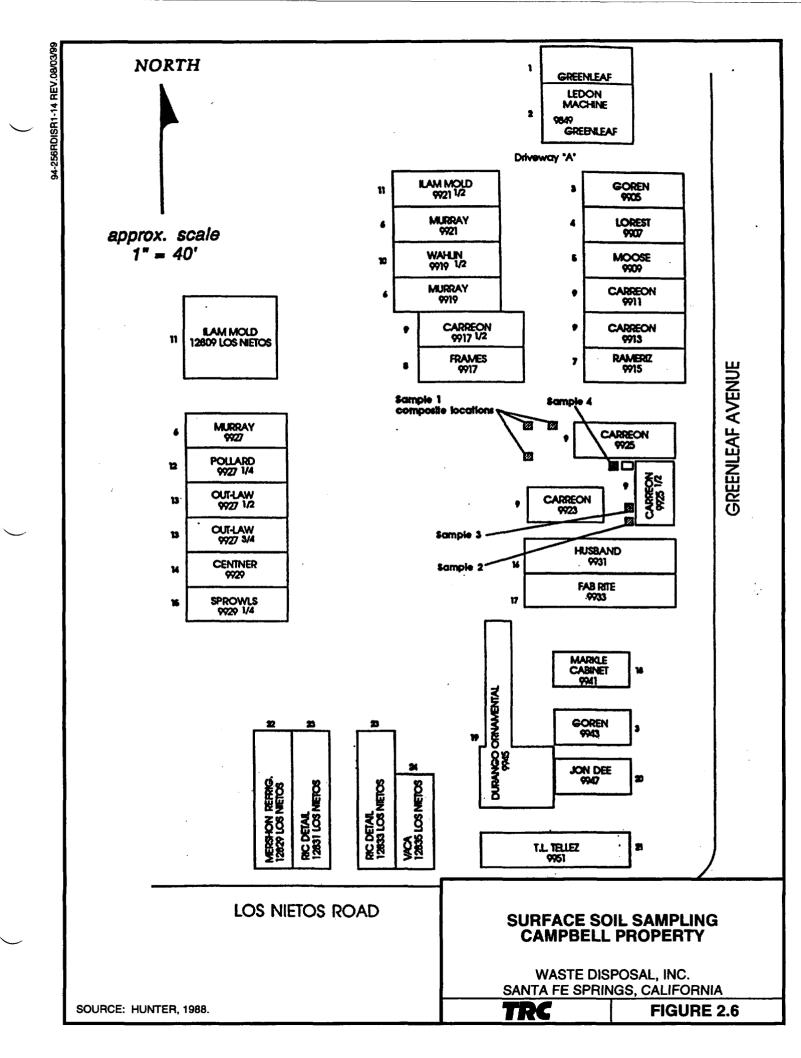
CPT SOUNDINGS CAMPBELL

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

SOURCE: DAMES & MOORE, 1986b.

TRC

FIGURE 2.5

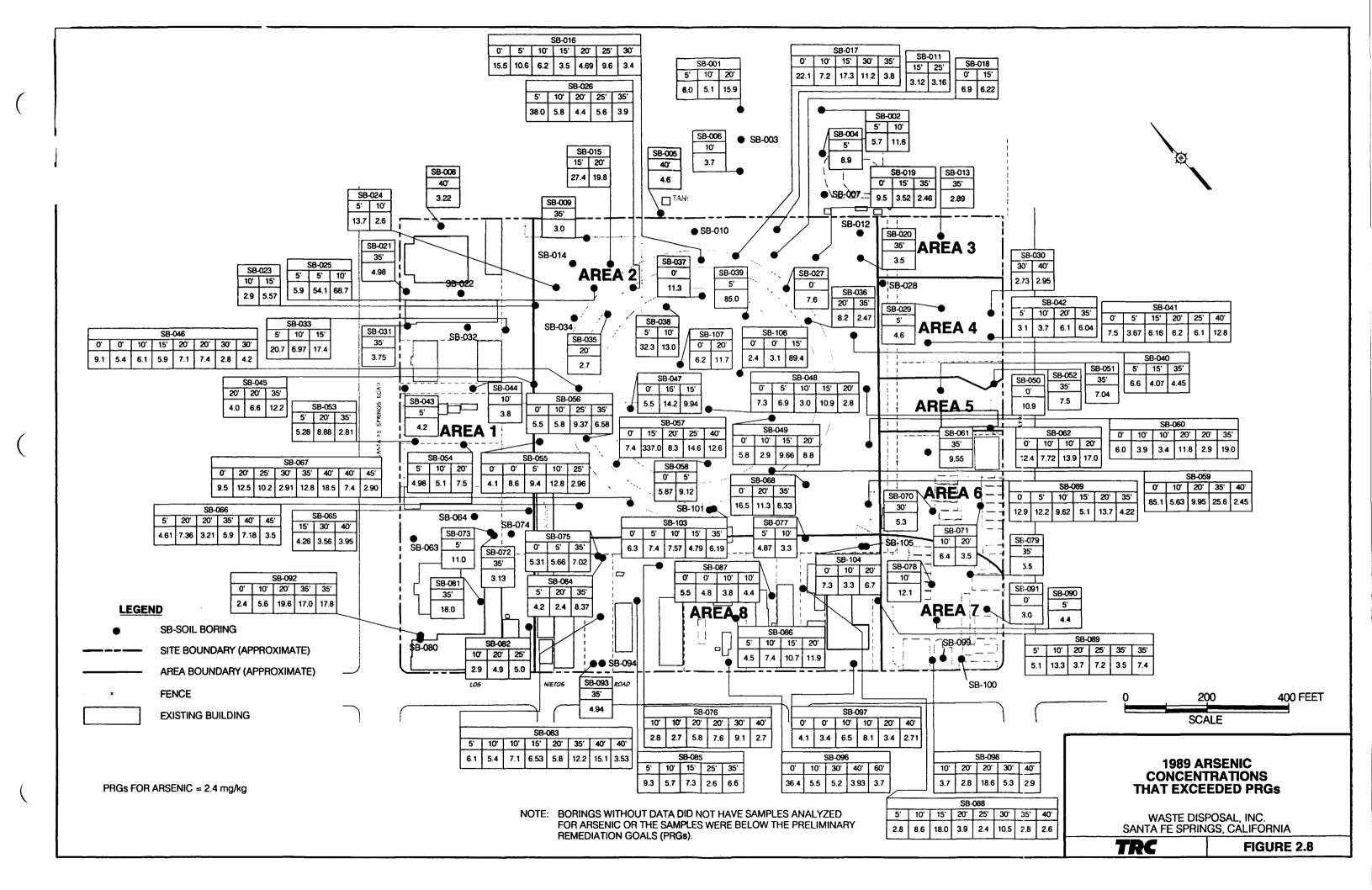


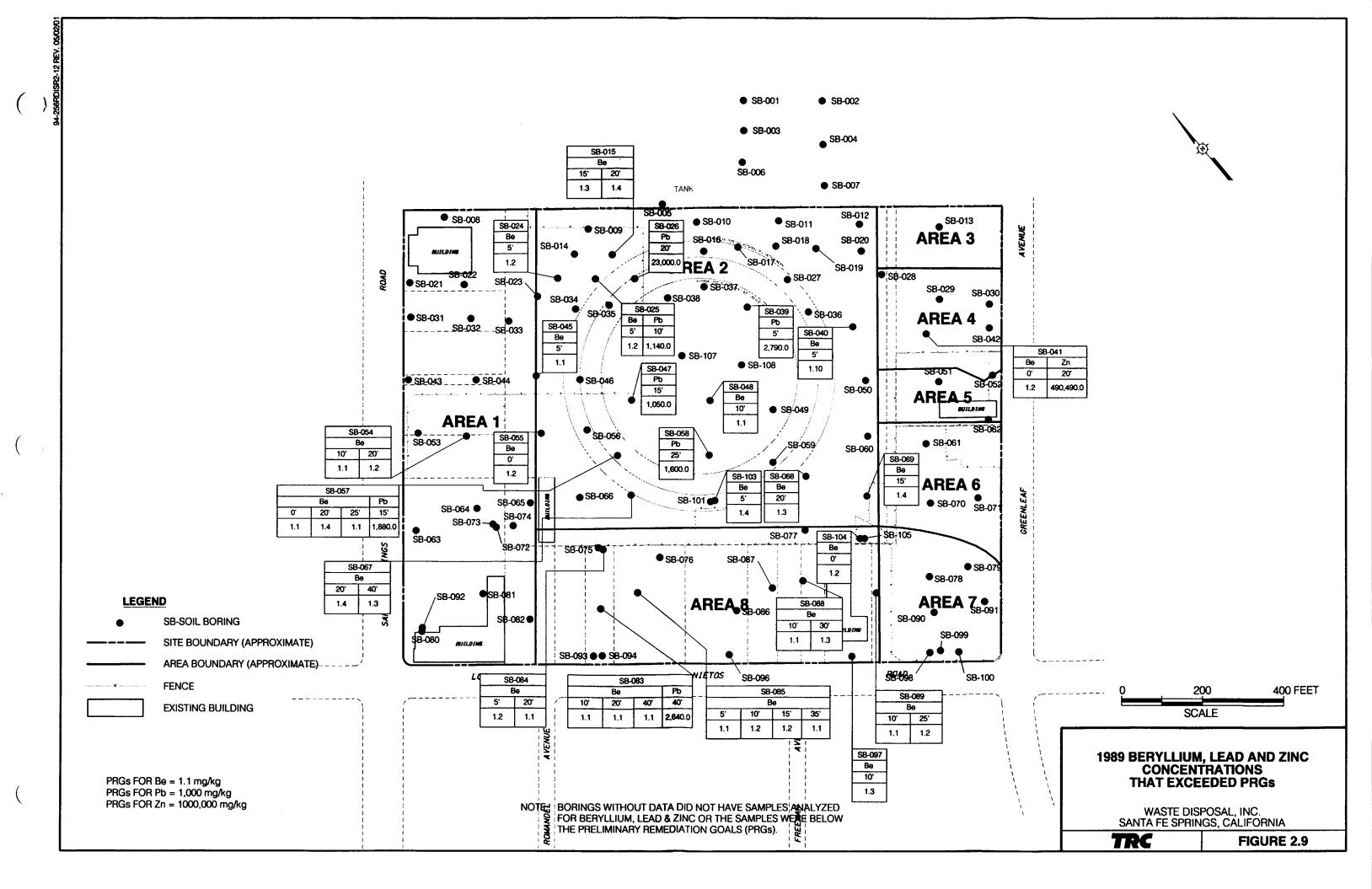
SANTA FE SPRINGS, CALIFORNIA

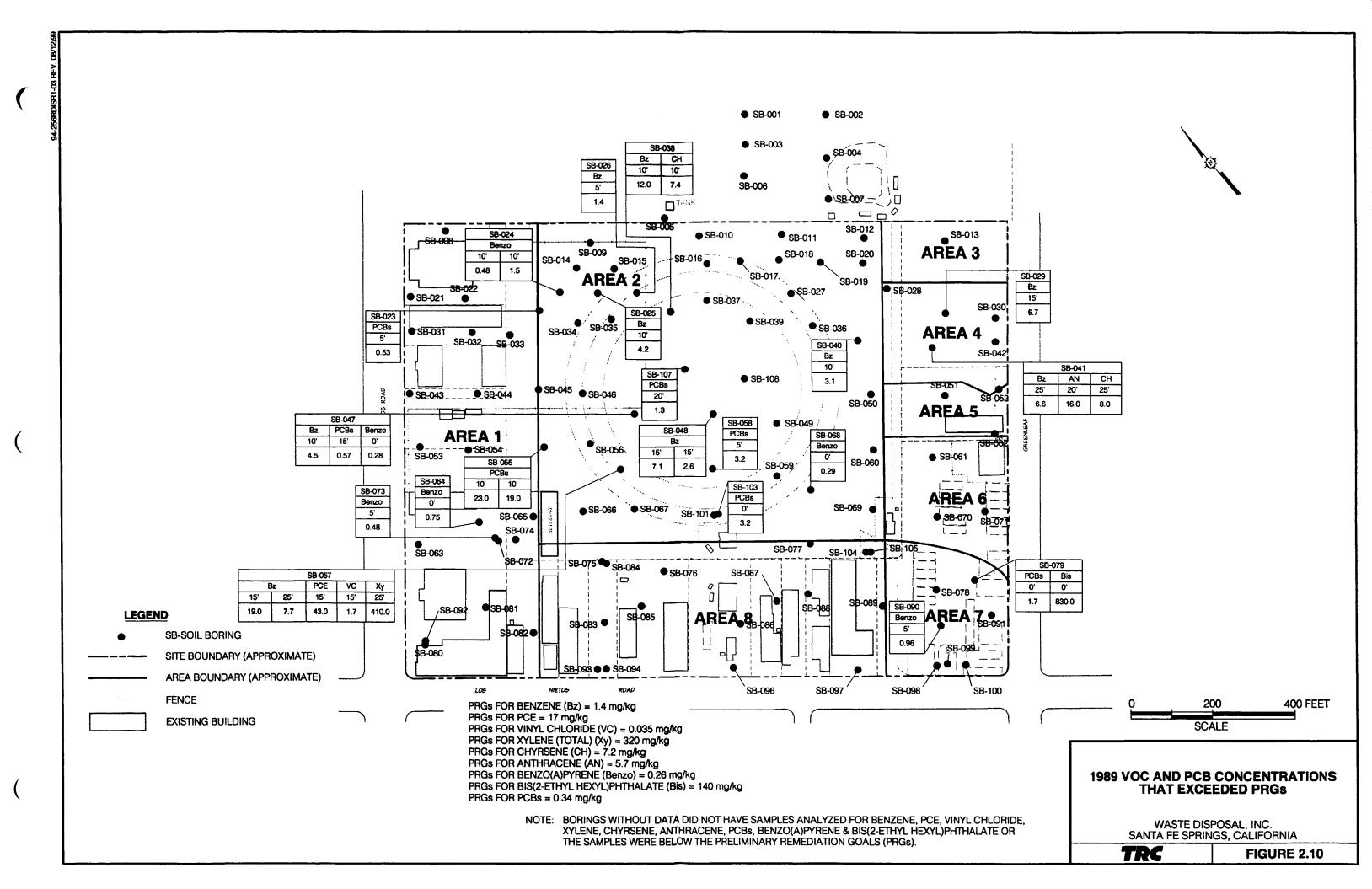
FIGURE 2.7

94-256RDISR1-15 REV.08/03/99

SOURCE: EBASCO SERVICES, INC., 1989a.

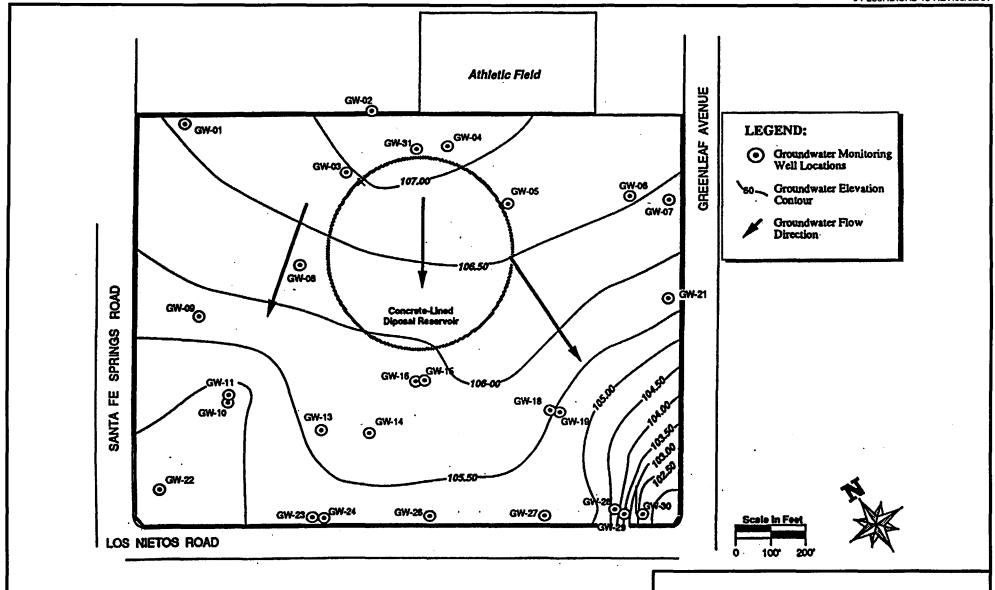






SOURCE: EBASCO SERVICES, INC., 1989b.

FIGURE 2.11



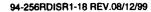
GROUND WATER ELEVATION MAP NOVEMBER 1988

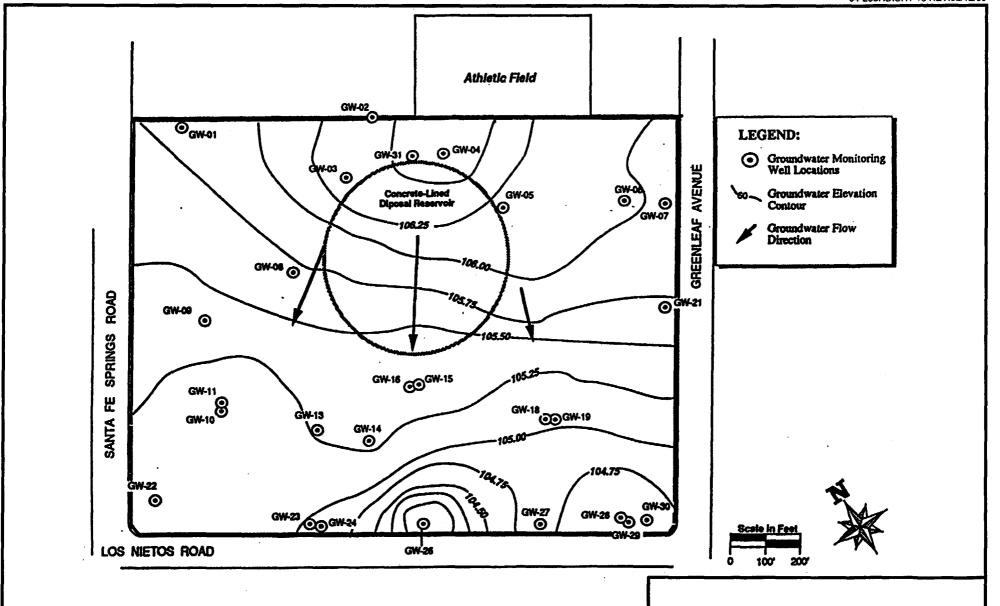
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 2.12

SOURCE: EBASCO SERVICES, INC., 1989b.





GROUND WATER ELEVATION MAP JANUARY 19, 1989

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 2.13

SOURCE: EBASCO SERVICES, INC., 1989b.

SUBSURFACE GAS MONITORING WELL LOCATIONS

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

SOURCE: EBASCO SERVICES, INC., 1989c.

TDC

FIGURE 2.14

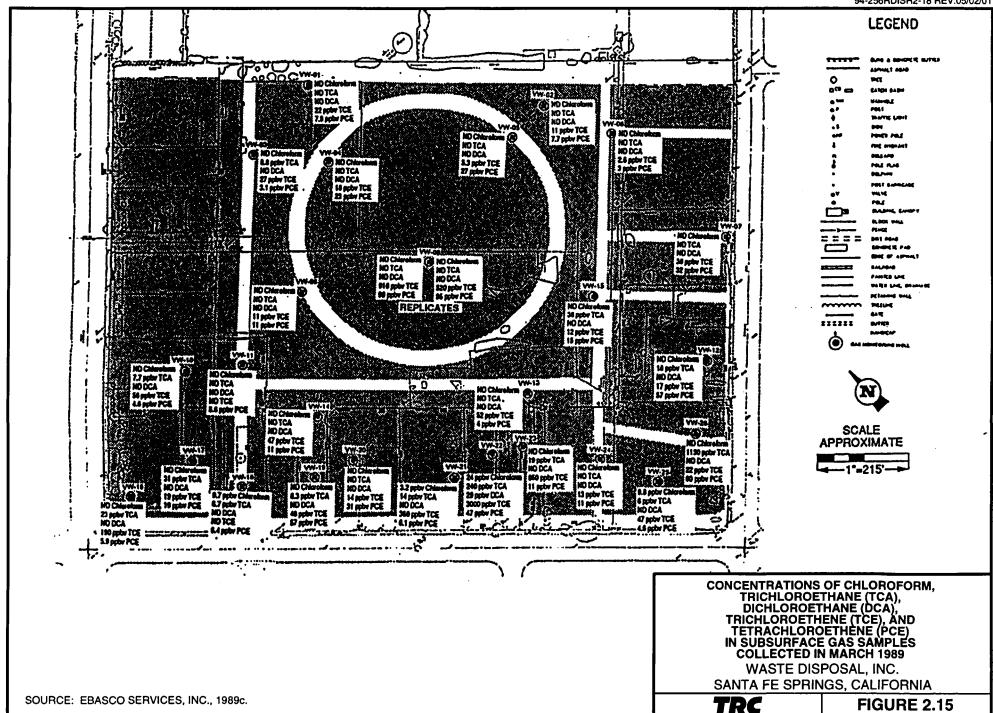
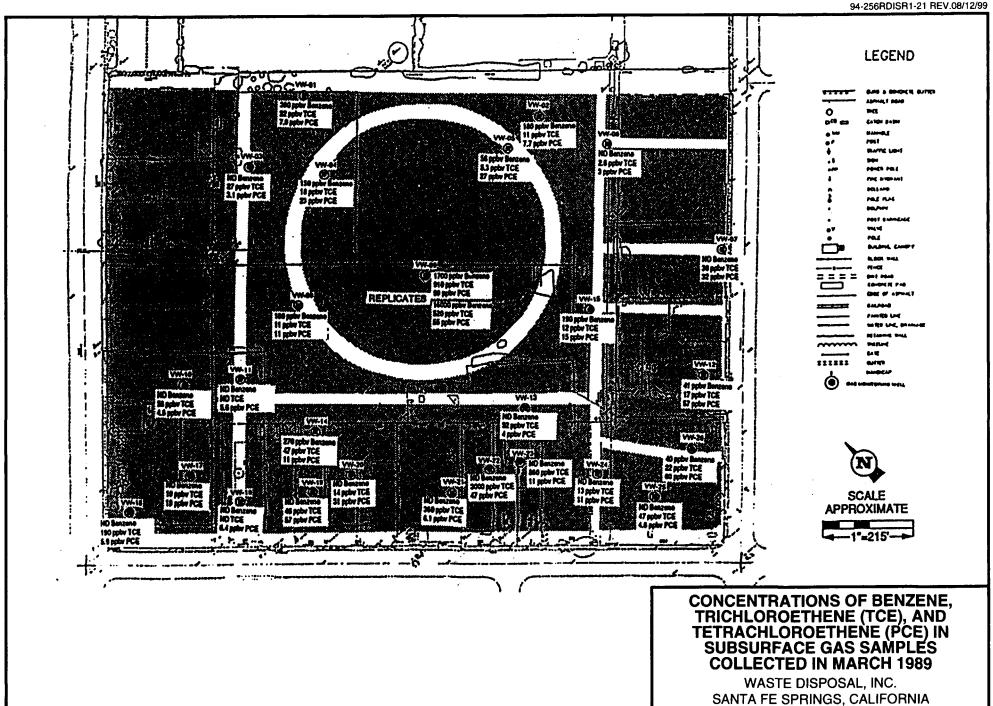
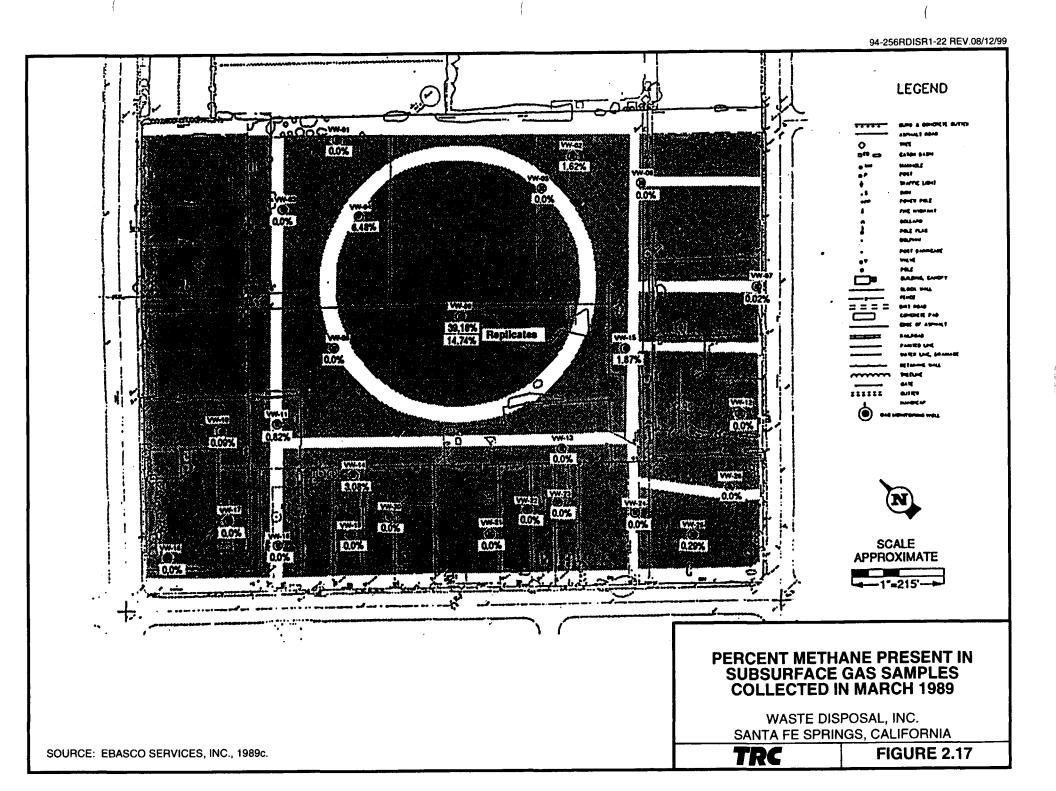


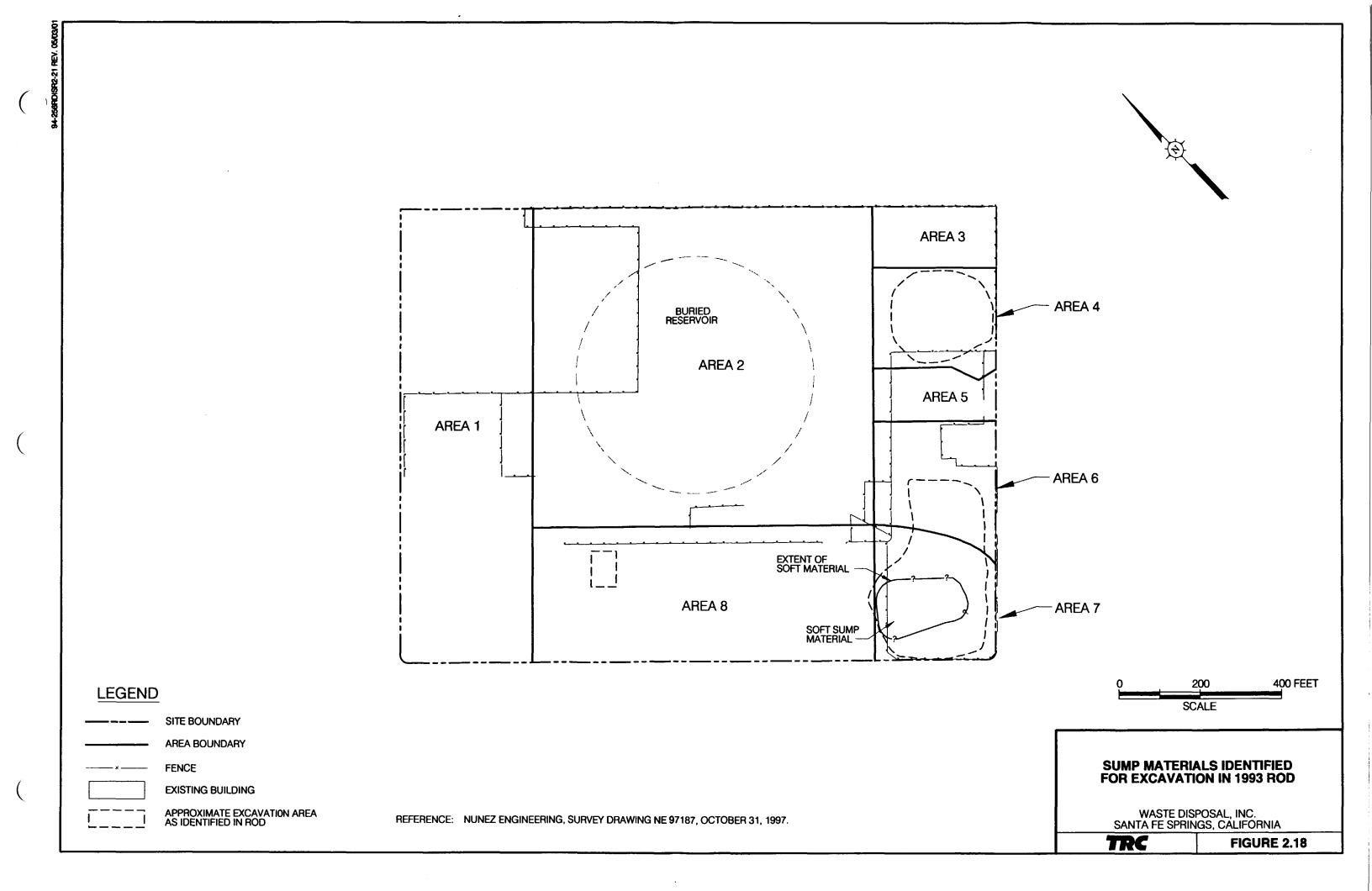
FIGURE 2.16

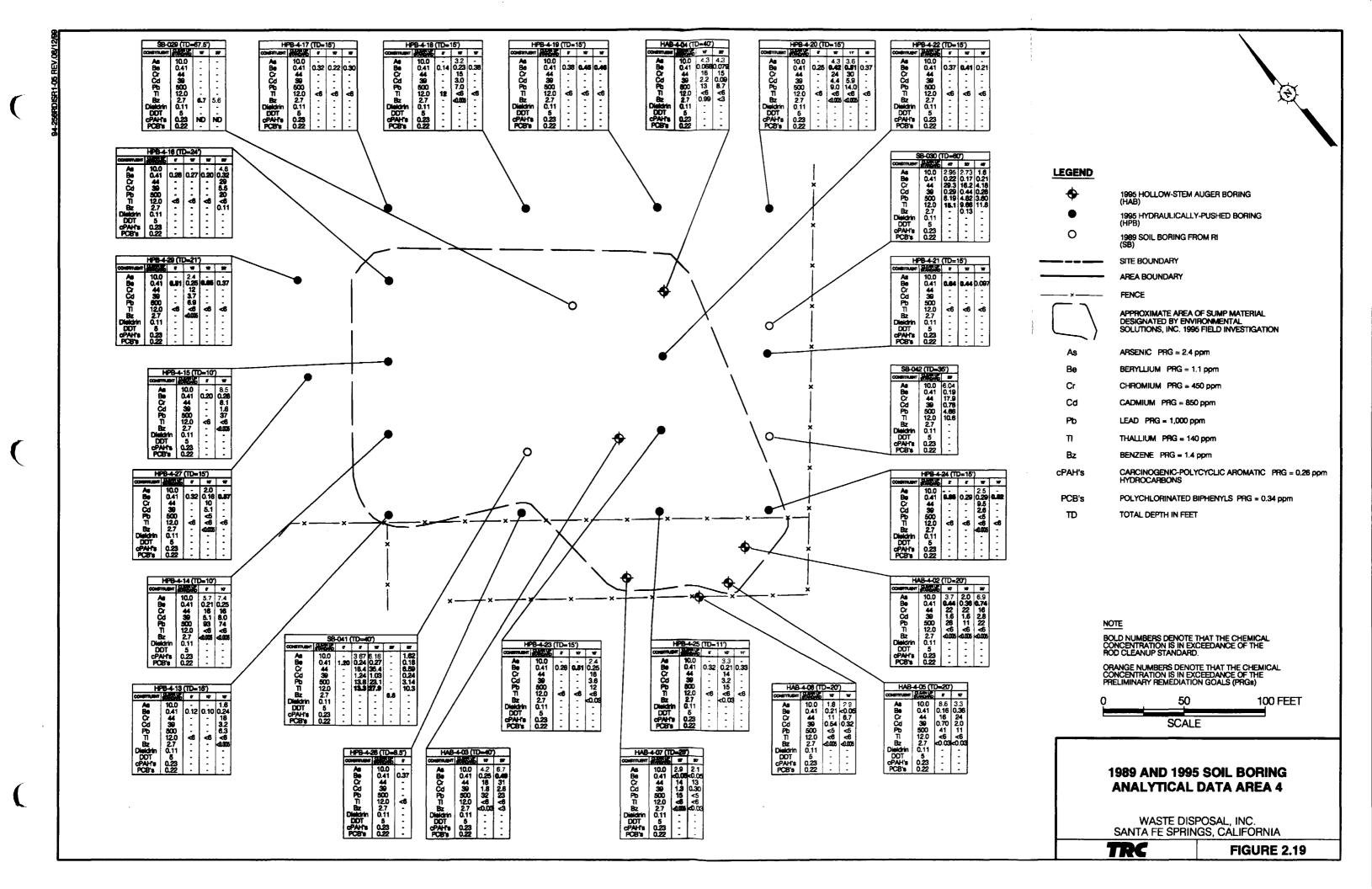


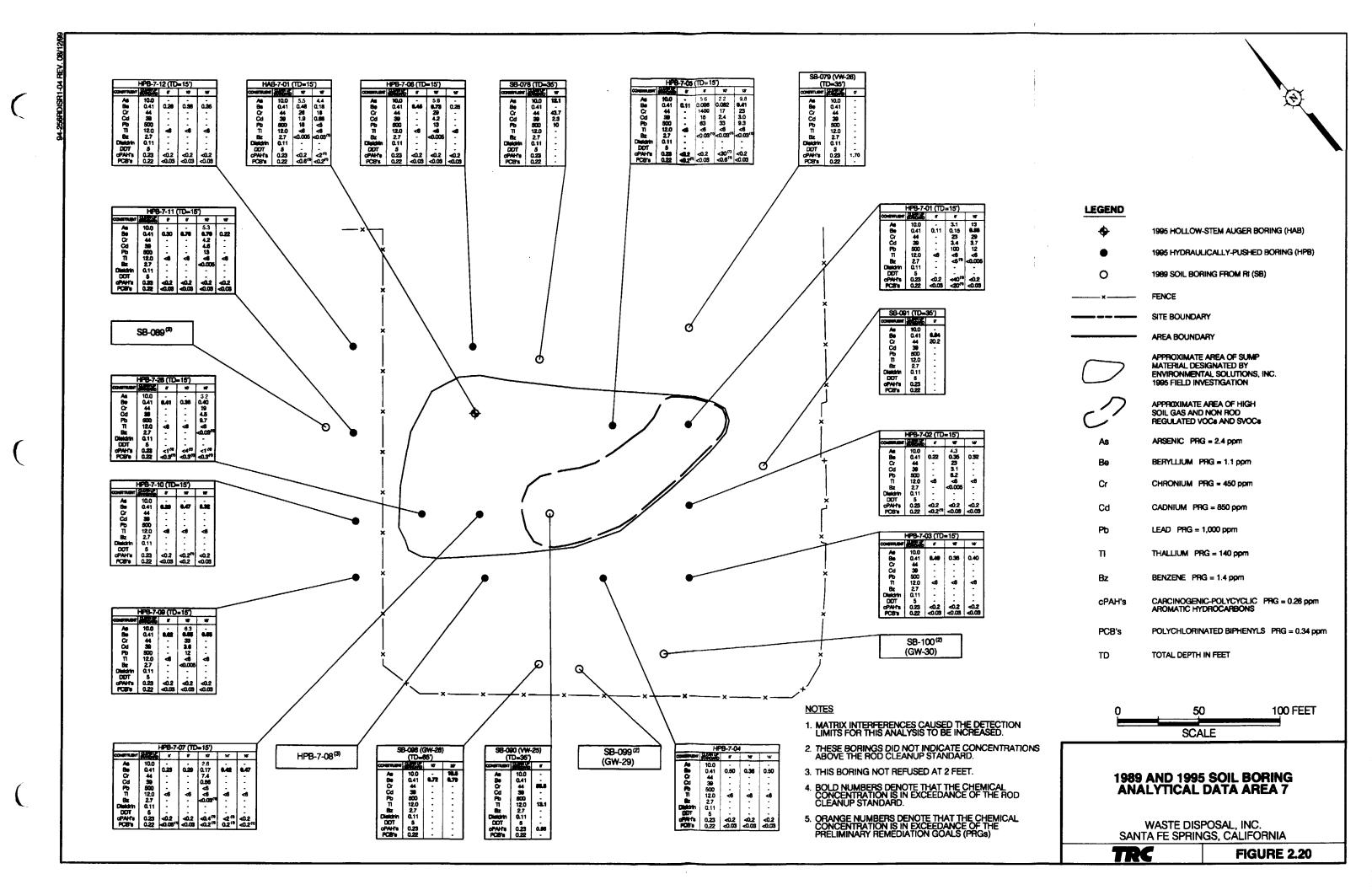
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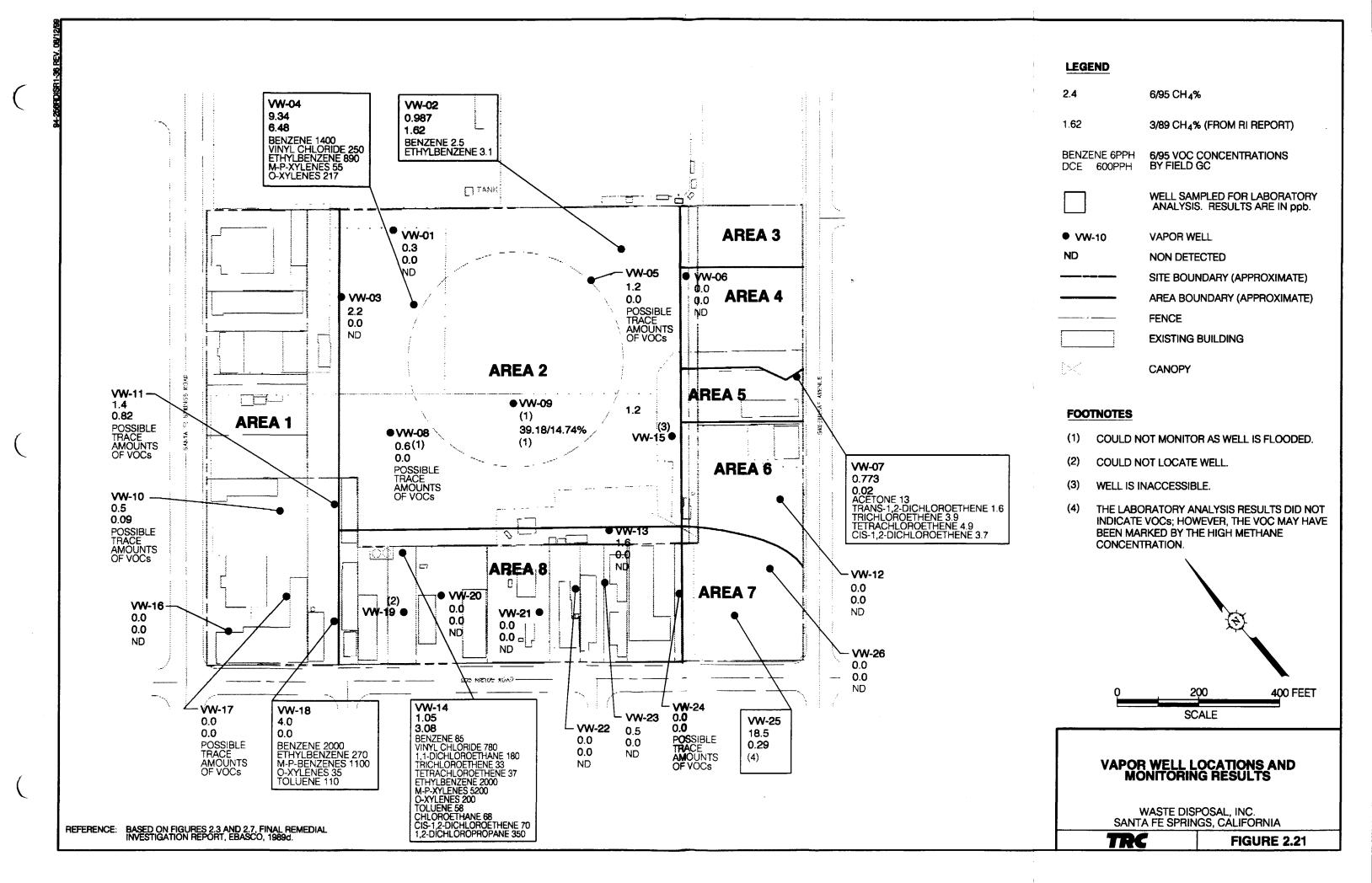
SOURCE: EBASCO SERVICES, INC., 1989c.

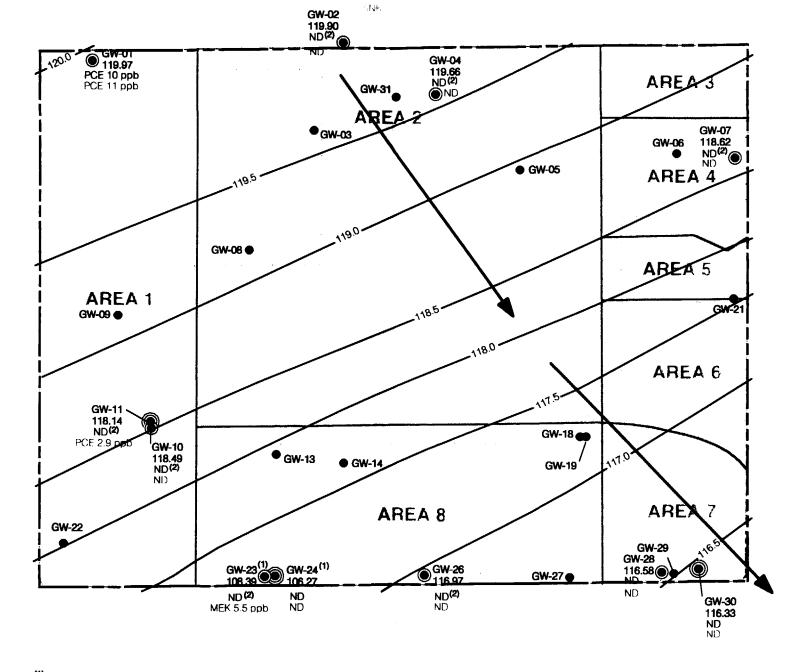














GROUND WATER MONITORING WELL ● GW-08 (NOT MONITORED OR SAMPLED)

● GW-01

SHALLOW GROUND WATER MONITORING WELL SAMPLED

GW-11

DEEP GROUND WATER MONITORING WELL SAMPLED

SITE BOUNDARY (APPROXIMATE) AREA BOUNDARY (APPROXIMATE)

FENCE

EXISTING BUILDING

CANOPY

GROUND WATER ELEVATION CONTOUR (JUNE 1996)(FEET ABOVE MSL)

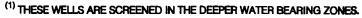
GROUND WATER FLOW DIRECTION (JUNE 1995)

PCE 10 ppb

VOC CONCENTRATION IN GROUND WATER FROM JUNE 1995 ANALYSIS

PCE 11 ppb

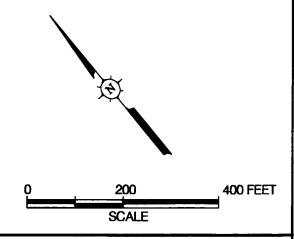
VOC CONCENTRATION IN GROUND WATER FROM SEPTEMBER 1995 ANALYSIS



⁽²⁾ THE SAMPLES FROM THESE WELLS WERE CONTAMINATED AT THE SURFACE DURING THE SAMPLING EFFORT. THE NON DETECTS SHOWN DO NOT INCLUDE CONSTITUENTS CONSIDERED TO BE SAMPLING-INDUCED CONTAMINANTS.

NOTE: GROUND WATER GRADIENT = 0.002 FT./FT.

REFERENCE: BASED ON FIGURE 2.3, FINAL REMEDIAL INVESTIGATION REPORT, EBASCO, 1989d AND FIGURE 2.7, EPA 1992 GROUND WATER MONITORING REPORT.

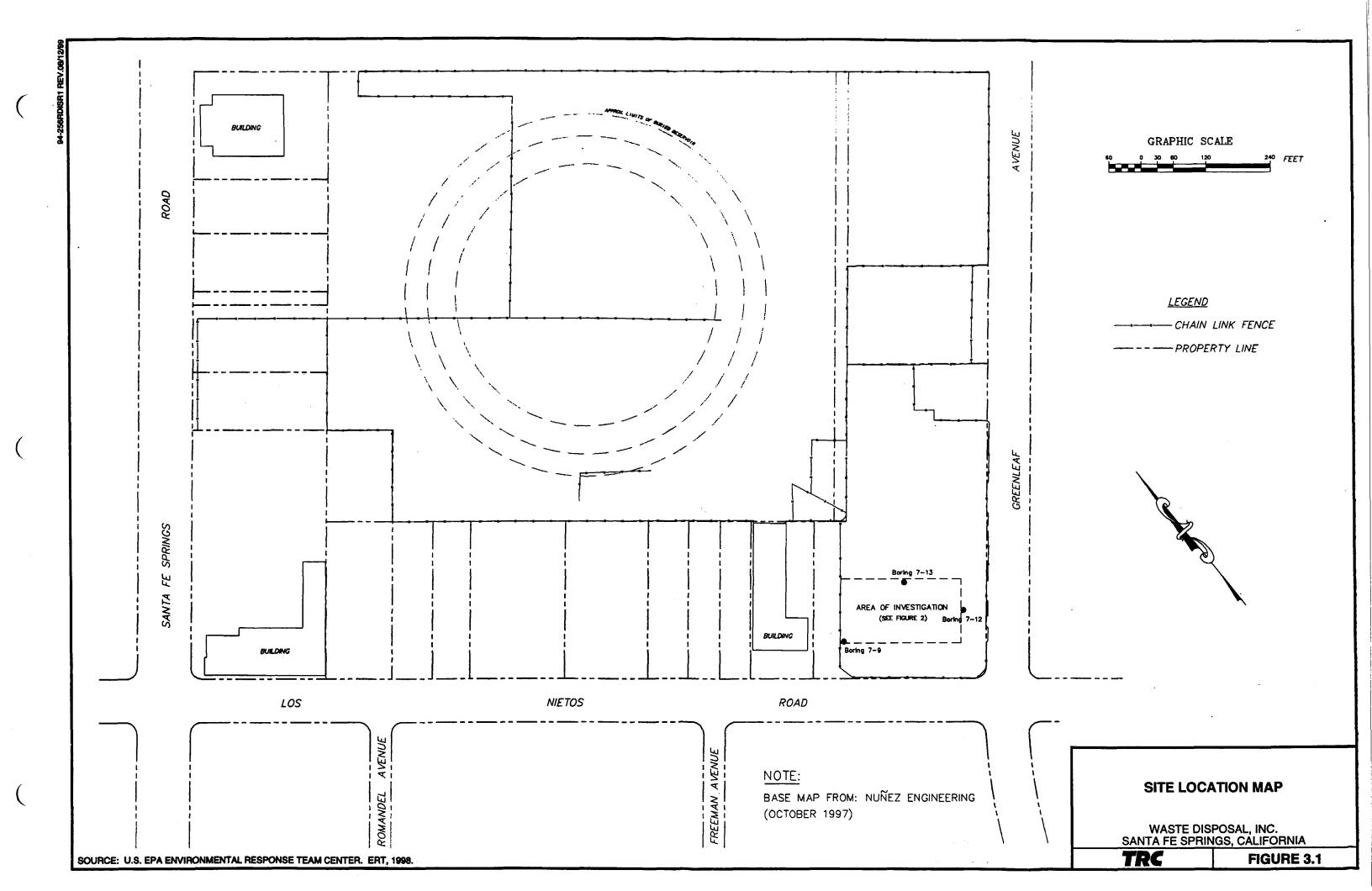


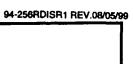
GROUND WATER CONTOURS, SAMPLING WELL LOCATIONS AND VOC ANALYSES RESULTS

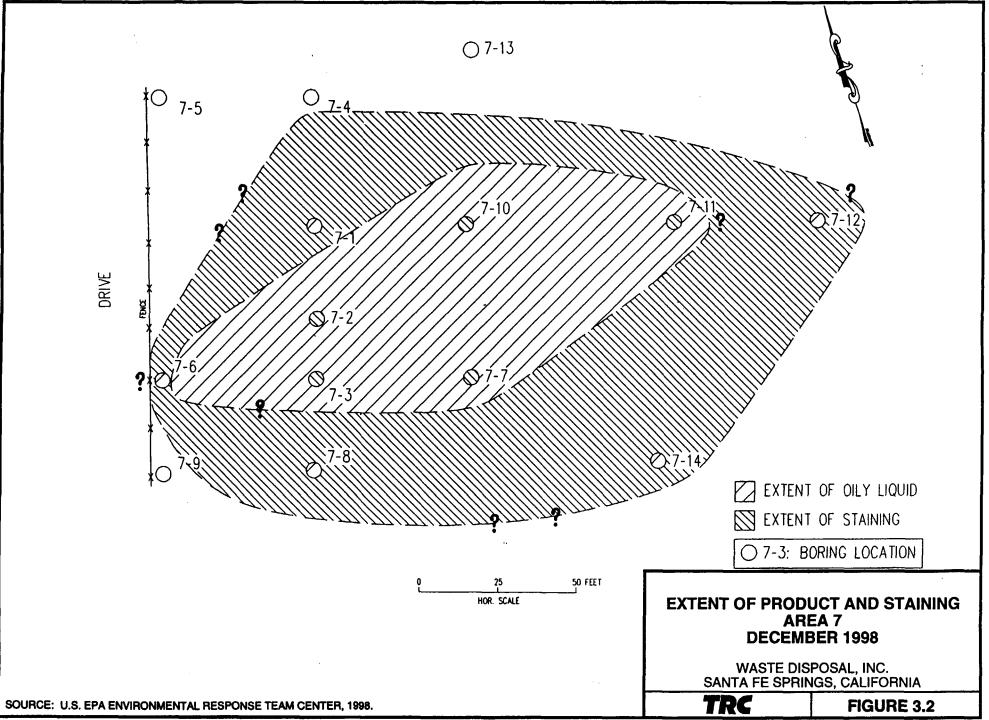
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

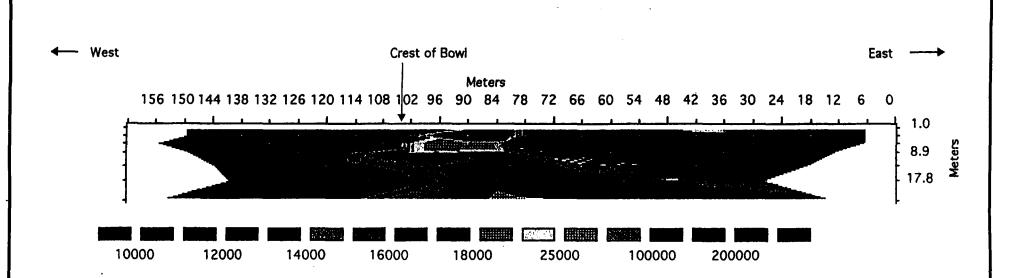
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FIGURE 2.22









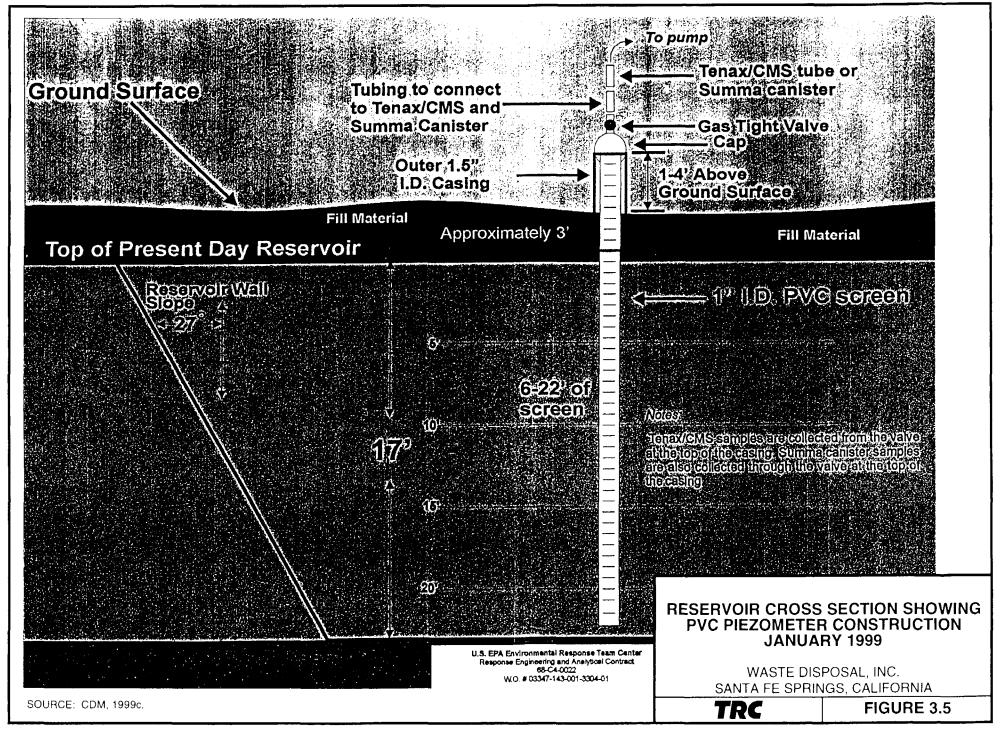
DIPOLE-DIPOLE RESISTIVITY PSEUDO-SECTION

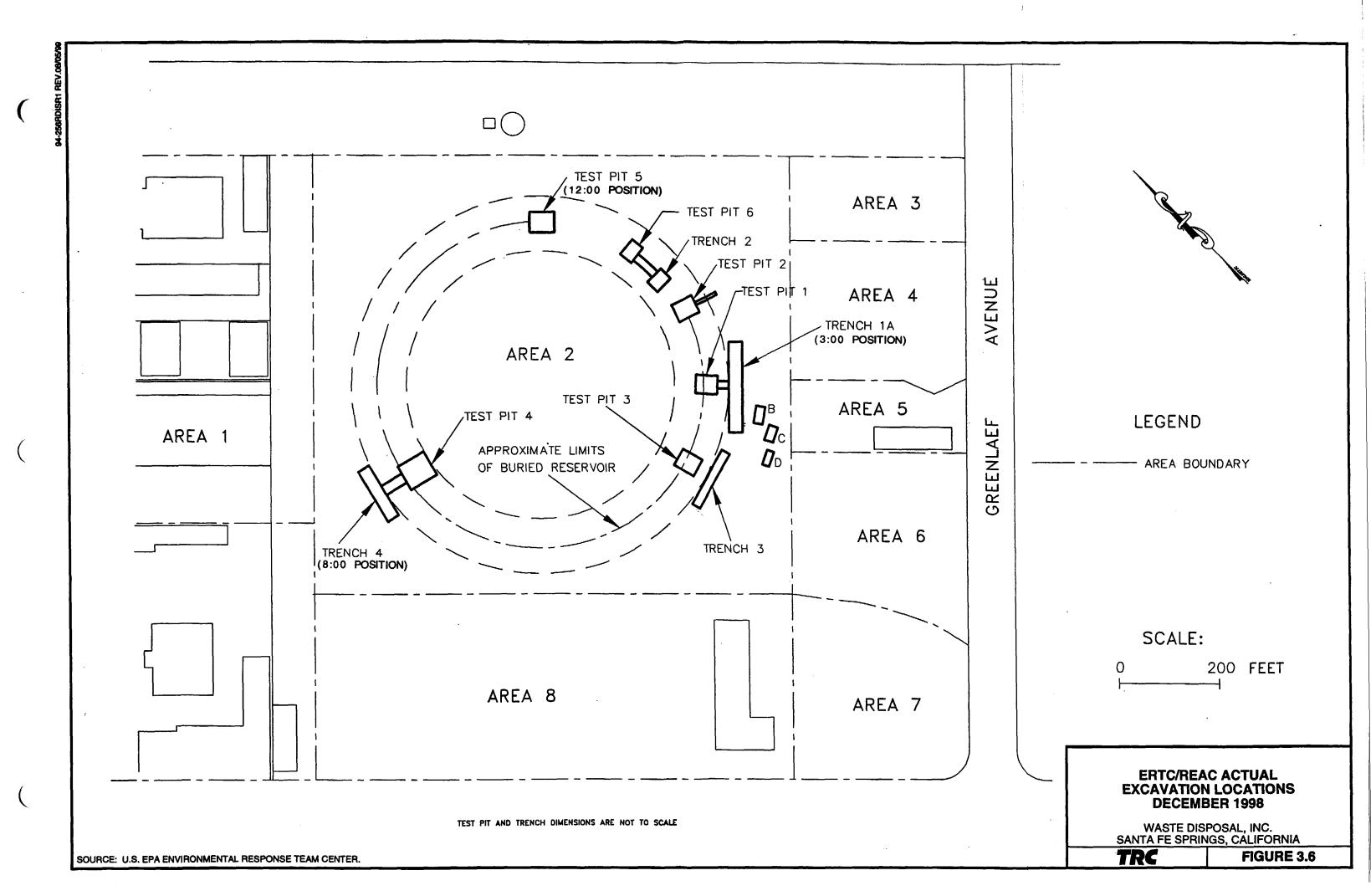
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

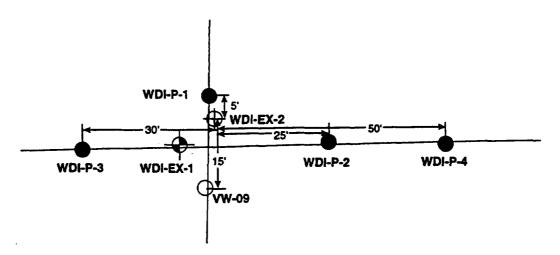
TRC

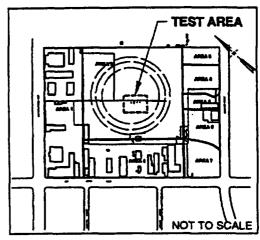
FIGURE 3.3

SOURCE: SPECTRUM GEOPHYSICS, CROSS SECTION BY P.JENNINGS. ERTC, 1999a.









LEGEND

Monitoring Probe

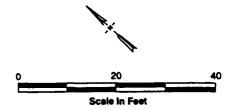
Existing Vapor Well



Existing Well

Extraction Well installed for TM 6

98P-2529



SOURCE: Report of Findings Technical Memorandum No. 6 Prepared by WDI Group

REFERENCE: Nunez Engineering, Sheet 1

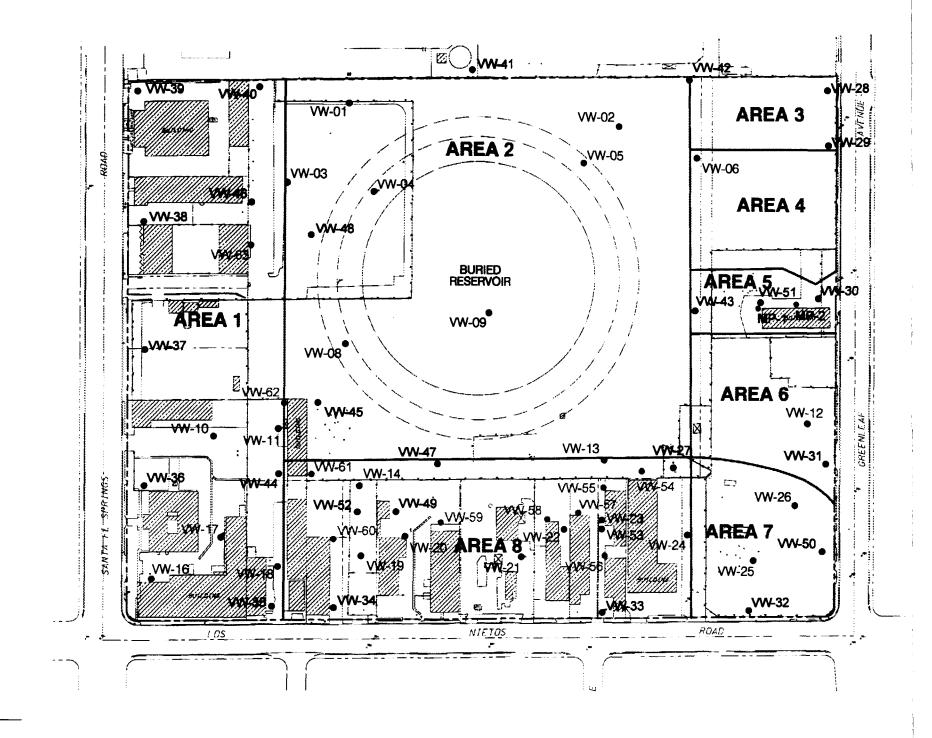
July 7, 1998

EXTRACTION WELL AND MONITORING PROBE LOCATIONS

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

FIGURE 3.7

SOURCE: WESTON, FIGURE 1.



LEGEND

——— SITE BOUNDARY

AREA BOUNDARY

MP-1
■ MONITORING PROBE

VW-16 ● RIJFS VAPOR WELLS

VW-36 WDIG VAPOR WELL

VW-61
■ EPA VAPOR WELL

NOT TESTED

ELEVATED DETECTION LIMIT

(2) CHECK

REFERENCE: NUNEZ ENGINEERING, SURVEY DRAWING NE 97187, OCT. 31, 1997.

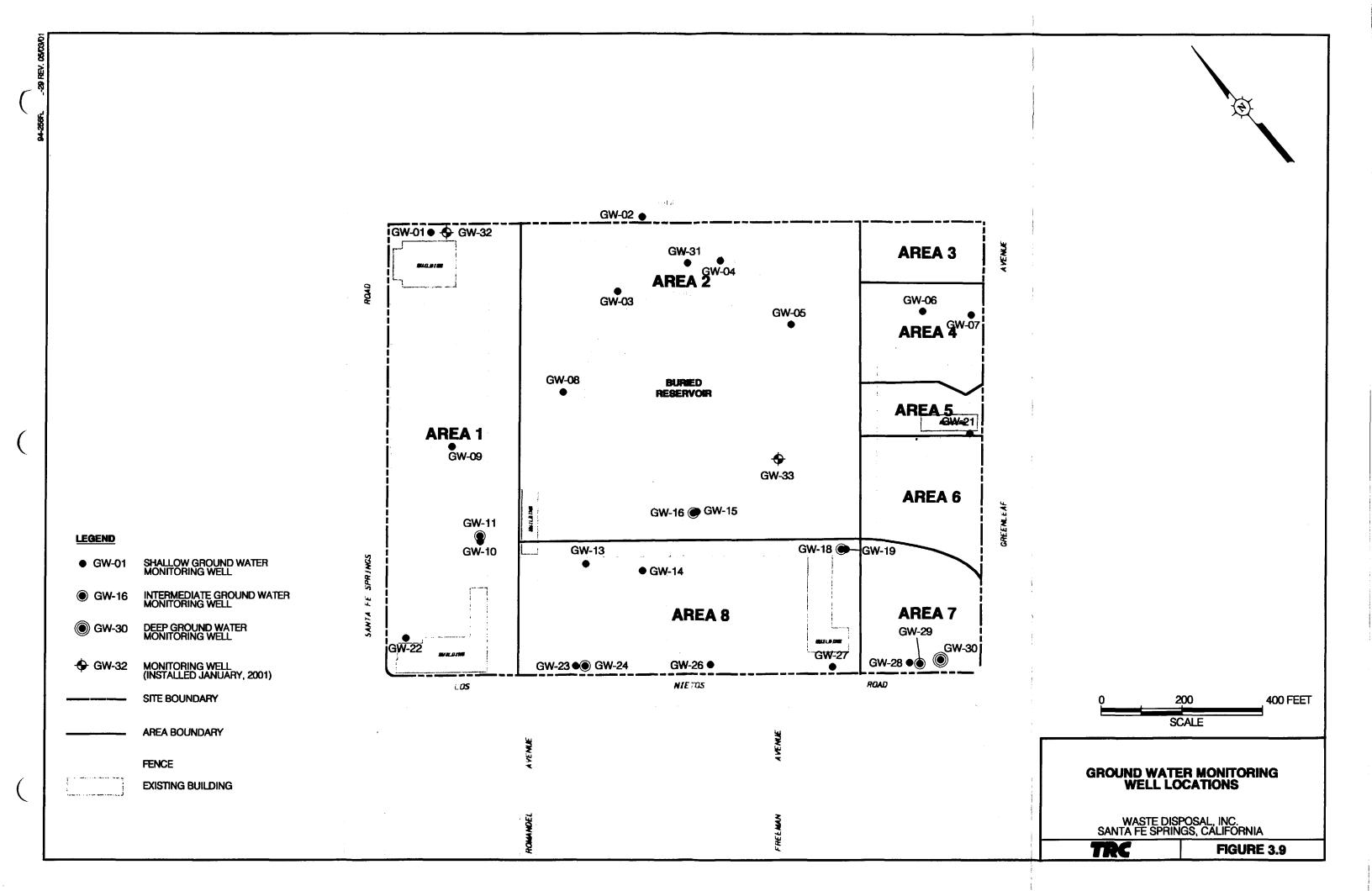


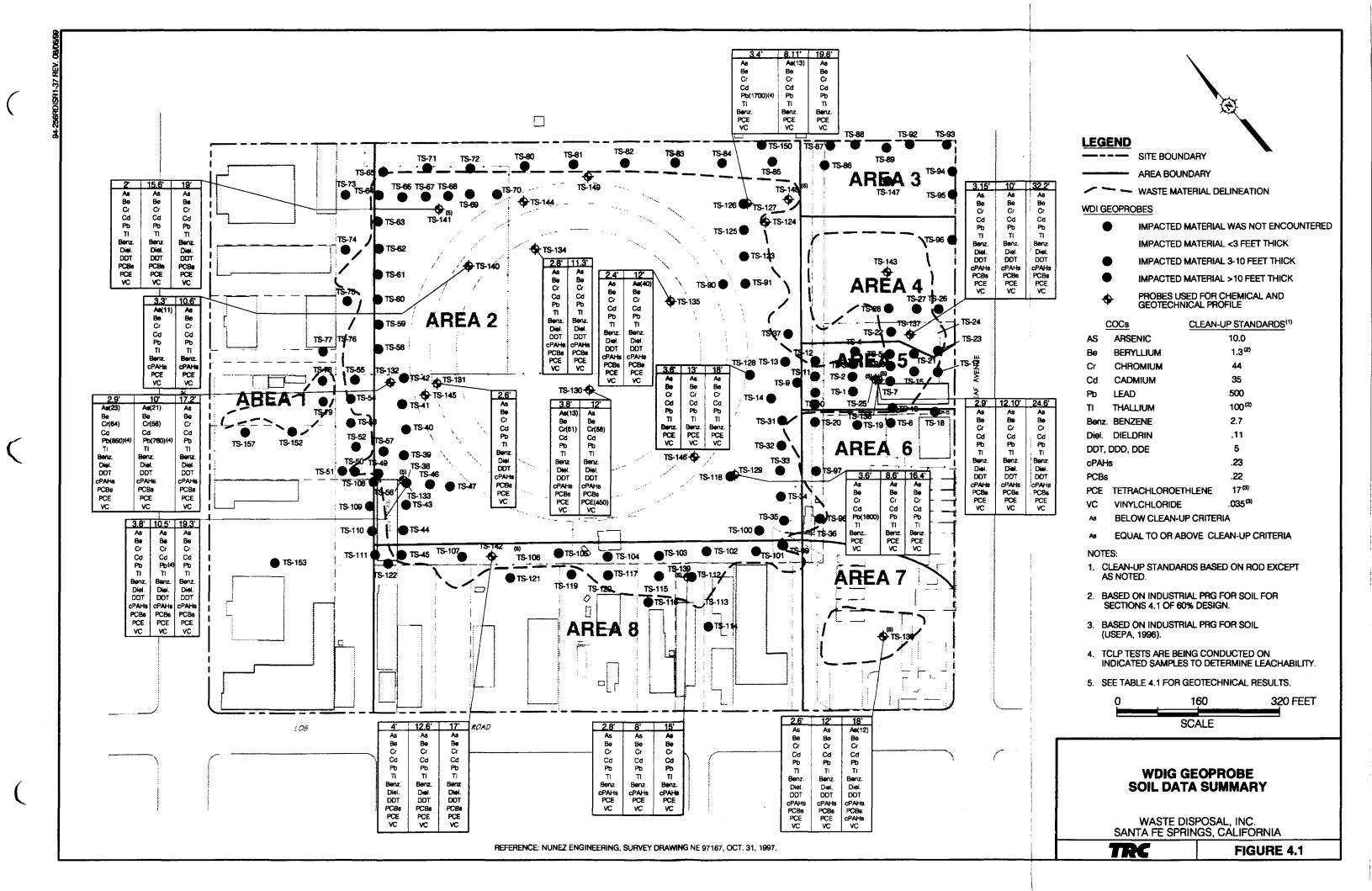
EXISTING VAPOR WELL NETWORK

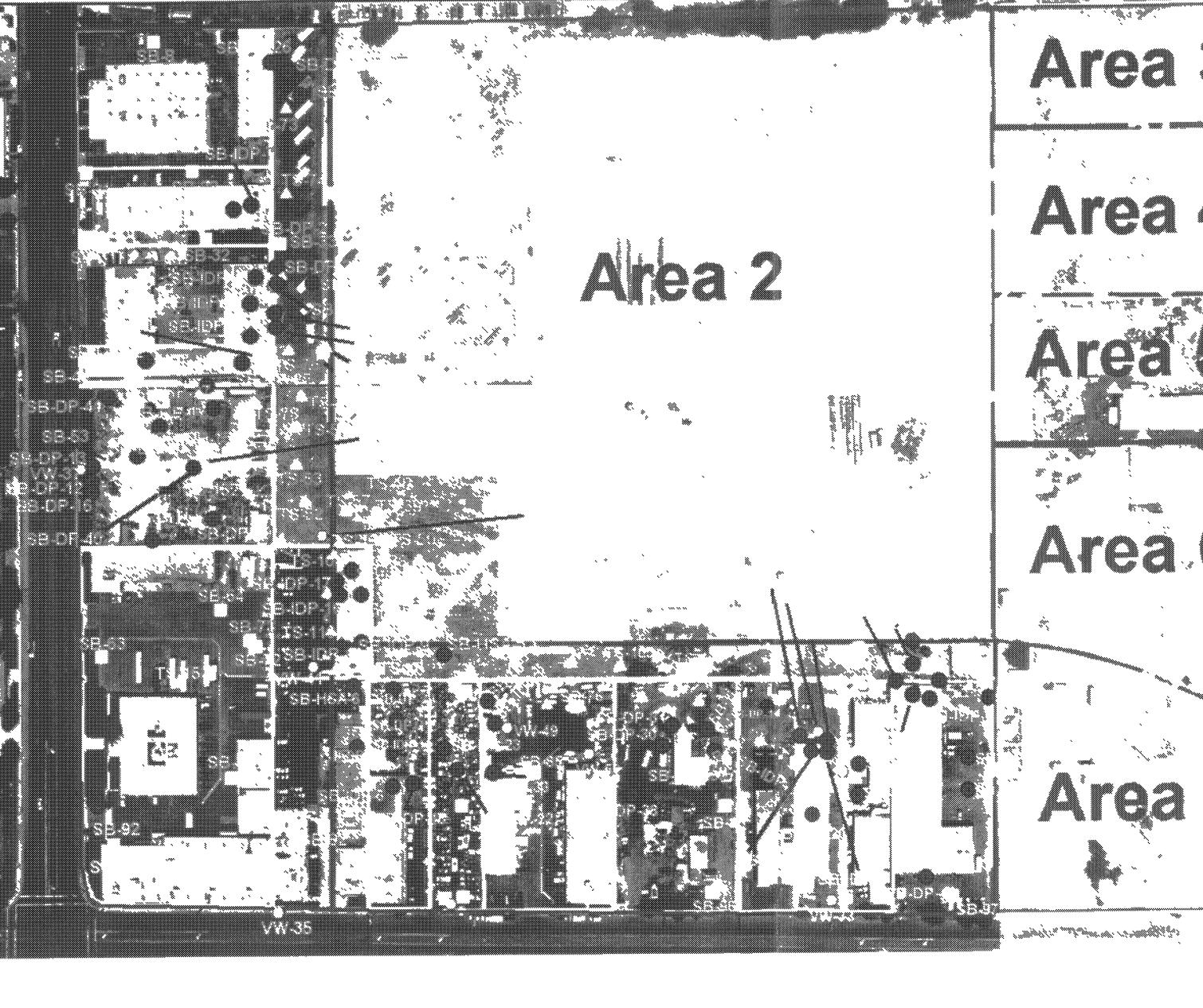
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 3.8







Area

4763.6

THE REPORT OF A STATE OF THE PARTY.

BORNALDEALDANAS III. Modernasia

LOCATIONS OF SSI BORINGS

WARTE DISTORAL NO _SANIÂTTSIZHĀSK <u>CALTORN</u>A

TRC

FIGURE 4.1A

PARAMETERS		GEOPROBE LIQUIDS SAMPLE LOCATIONS	
	WDI-TS-137	WDI-TS-141	
	OIL	WATER	
VOCs (ug/L)(1)			
Acetone	<10	<10	
Benzene	<0.5	<0.5	
Carbon Disulfide	<2.0	<1.0	
Methyl ethyl ketone	<10.0	<3.0	
Methyl isobutyl ketone	<4.0	<3.0	
Trichlorethene	<0.5	<0.5	
Vinyl chloride	<5	<0.5	
cis-1,2-Dichloroethene	<0.5	<0.5	
trans-1,2-Dichloroethene	<0.5	<0.5	
Tetrachloroethene	<0.5	<0.5	
	1	1	

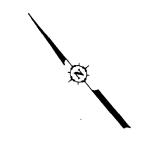
LEGEN

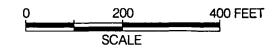
--- SITE BOUNDARY

- AREA BOUNDARY

- - WASTE MATERIAL DELINEATION

GEOPROBE LIQUIDS SAMPLE LOCATIONS





LOCATIONS OF GEOPROBE LIQUIDS SAMPLES AND ANALYSES RESULTS

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 4.2

(1) ONLY THOSE PARAMETERS WHICH HAD MEASURABLE CONCENTRATIONS IN ONE OR MORE OF THE ANALYSES SHOWN ARE LISTED. THE PARAMETER LIST OF THE VARIOUS ANALYSES IS MUCH MORE COMPREHENSIVE.

(2) THIS ANALYSES HAD ELEVATED DETECTION LIMITS.

NA = ANALYZED

N.

5 35 (33)

Commence of the contract of th

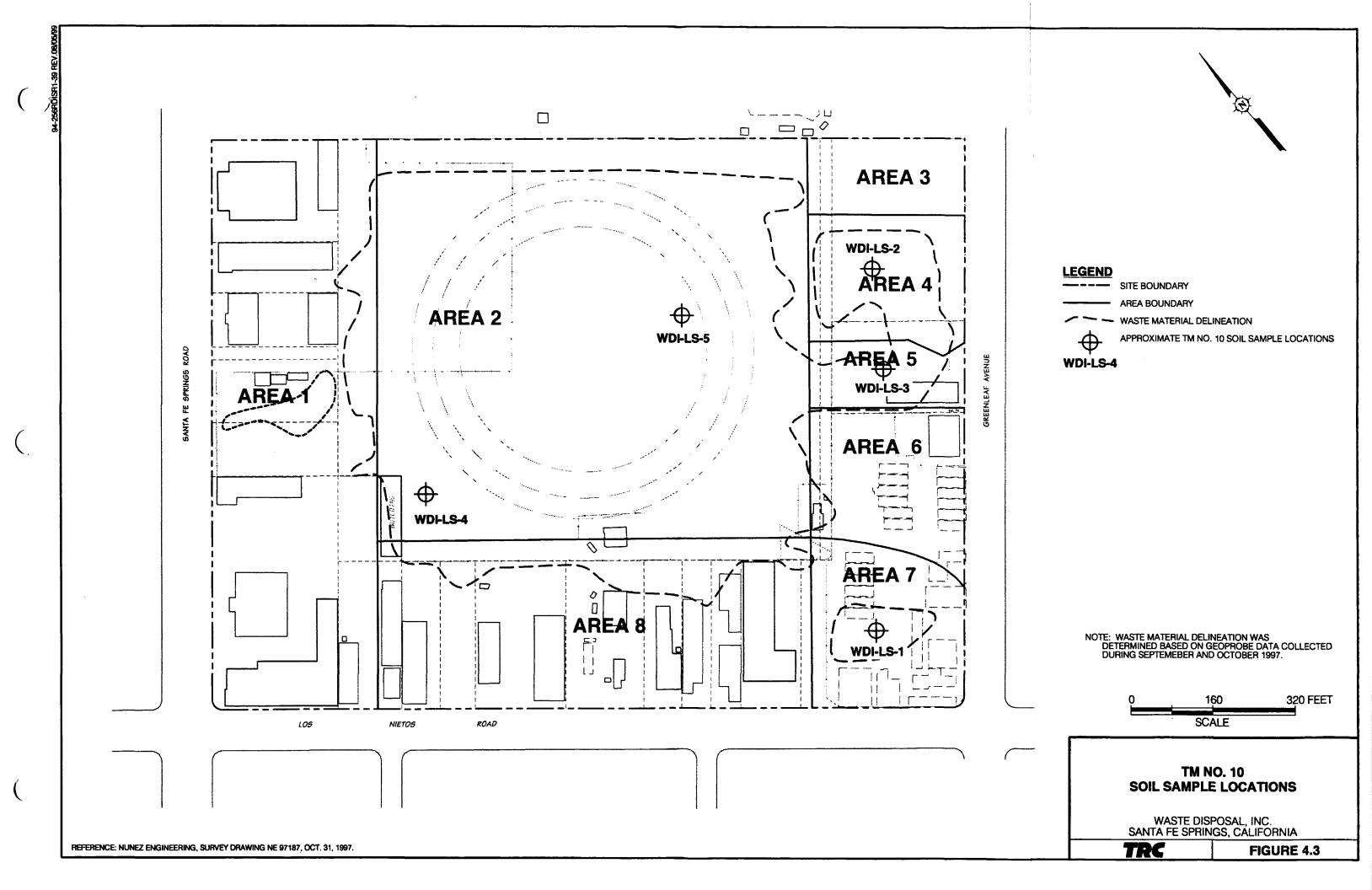
WELLY WALL

1V 145 24 26 EX 27 2 2 2

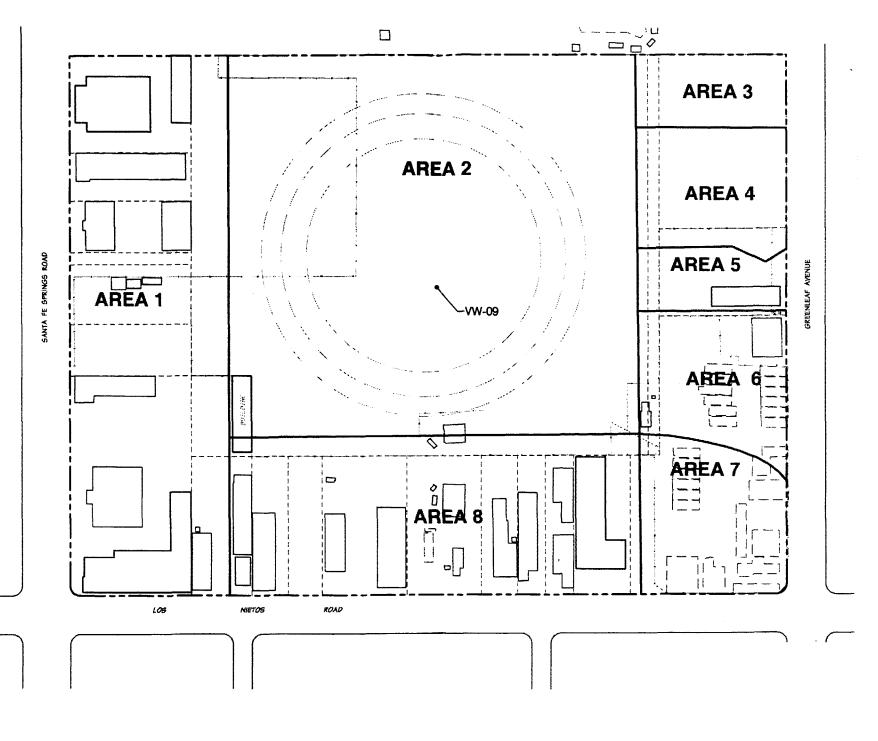
REVISED LIMITS OF BURIED WASTE

WASTED SPOSALING SAN AFT SHRINGS CALLININA

FIGURE 4.2A



RESERVOIR LIQUIDS SAMPLE LOCATION **PARAMETERS** OIL WATER TOTAL METALS (mg/L) 0.19 Antimony <0.1 Barium 0.41 Beryllium < 0.001 Cadmium < 0.005 Chromium 0.011 < 0.04 Cobalt 0.030 Copper 0.025 Mercury <0.0002 Molybdenurr 0.54 Nickel 0.094 Selenium < 0.004 <0.01 Thallium <0.07 < 0.04 Vanadium 0.030 Aluminum 4.3 Calcium 31 2.8 VOCs (ug/L) (1) Acetone 760 Benzene 72 Carbon Disulfide Methyl ethyl ketone 1,800 Methyl isobutyl ketone 820 Trichlorethene 11 Vinyl chloride cis-1,2-Dichloroethene 110 trans-1,2-Dichloroethene 2 Tetrachioroethene <0.5 SVOCs (ug/L)(1)(2) 2,4-Dimethylphenol 2-Methylnaphtalene 1,500 890 2-Methytphenol (o-Cresol) 690 4-Methylphenol (p-Cresol) 1,400 Benzyl Alcohol 1,000 740 Naphthelene 620 Phenol 320 1,000 Pesticides (up/L)(1) NA 0.39 p.p'-DDE Simulated Distillation (mo/L) C10-C11 41,000 C12-C13 61,000 C14-C15 58,000 60,000 C16-C17 C18-C19 40,000 100,000 C20-C23 C24-C27 73,000 C28-C31 83,000 C32-C35 68.000 C36-C39 32,000 <200 C40-C43 <200 C44+

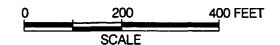


LEGEND

--- SITE BOUNDARY

AREA BOUNDARY

3



VW-09 LOCATION AND ANALYSIS RESULTS

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

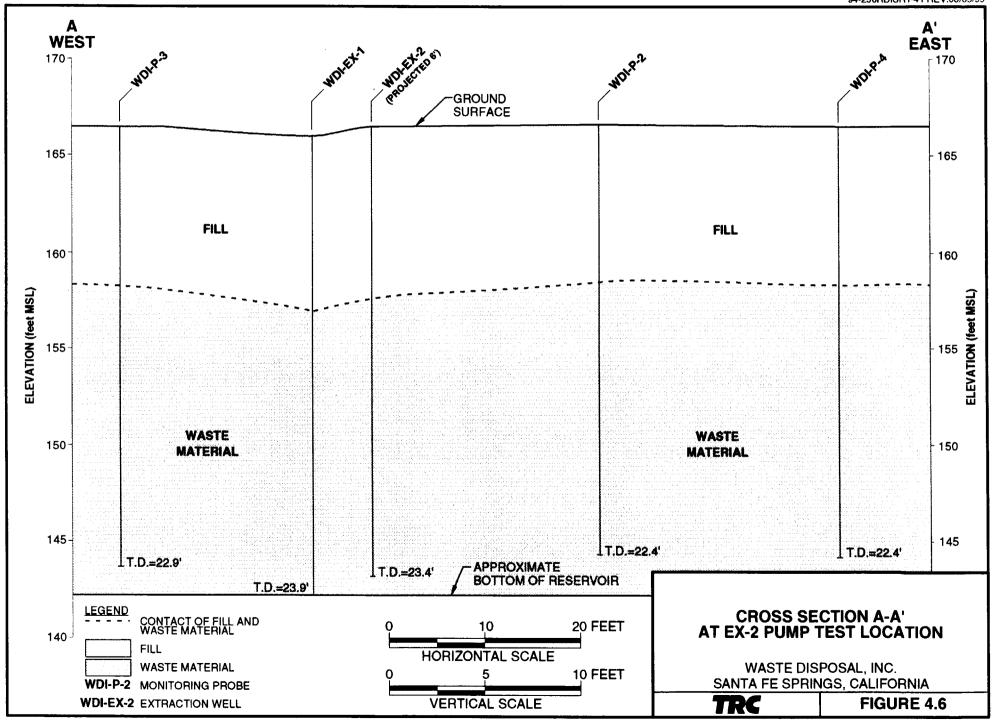
TRC

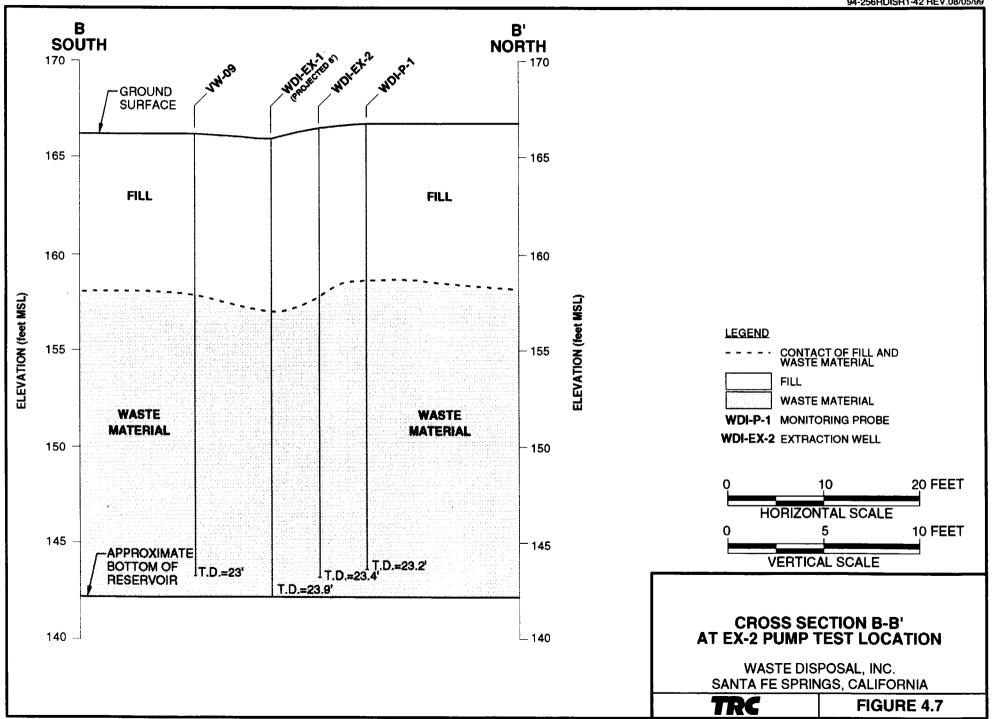
FIGURE 4.4

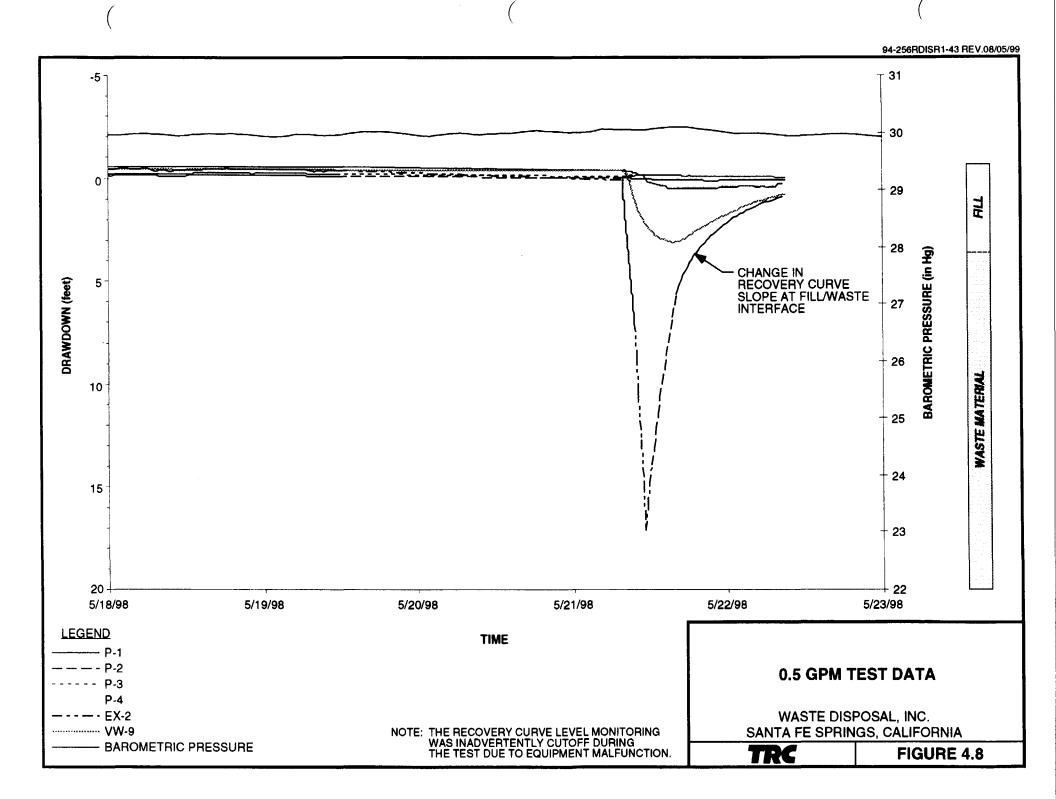
(1) ONLY THOSE PARAMETERS WHICH HAD MEASURABLE CONCENTRATIONS IN ONE OR MORE OF THE ANALYSES

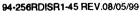
SHOWN ARE LISTED. THE PARAMETER LIST OF THE VARIOUS ANALYSES IS MUCH MORE COMPREHENSIVE. (2) THIS ANALYSES HAD ELEVATED DETECTION LIMITS.

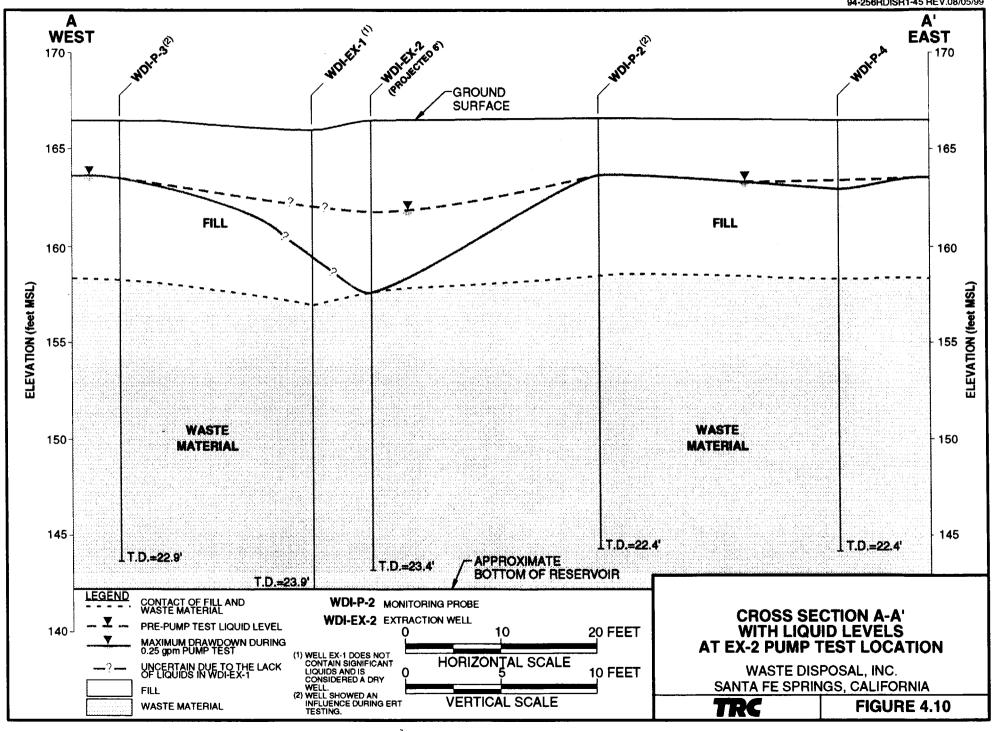
NA = ANALYZED

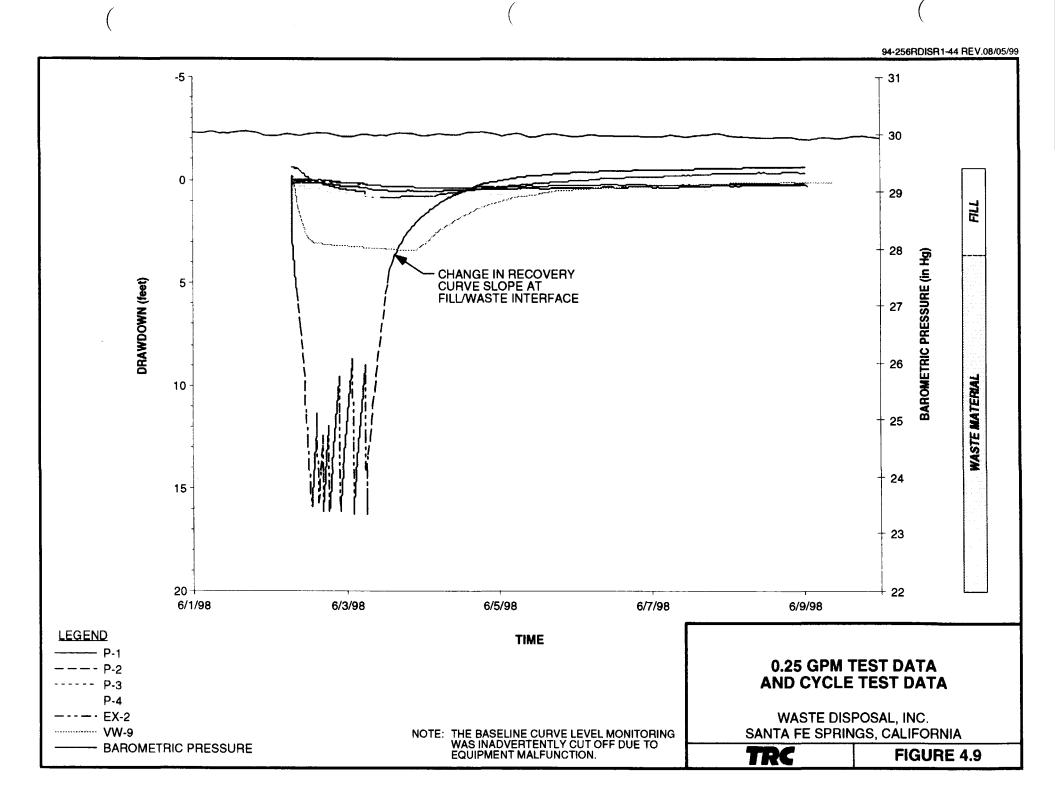


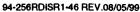


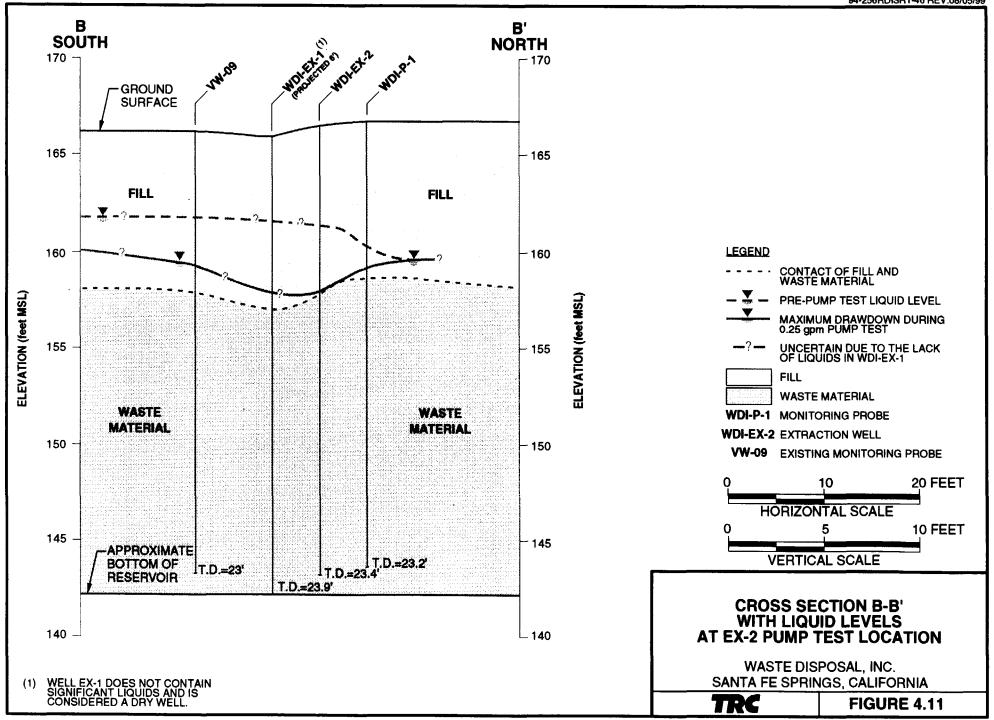


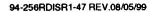


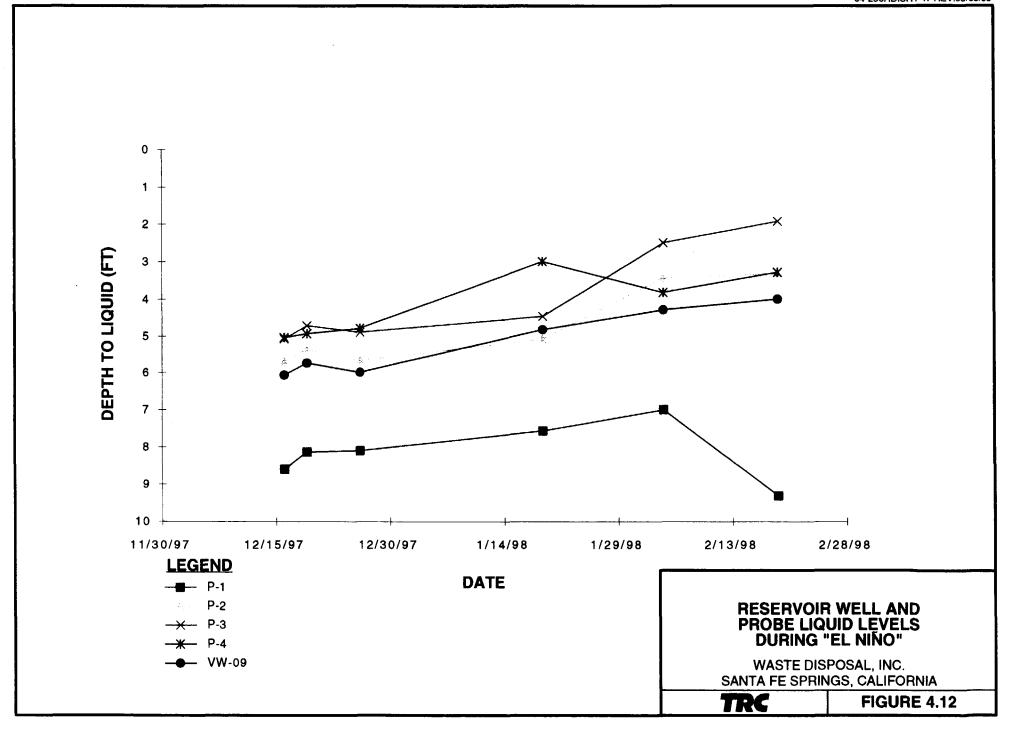












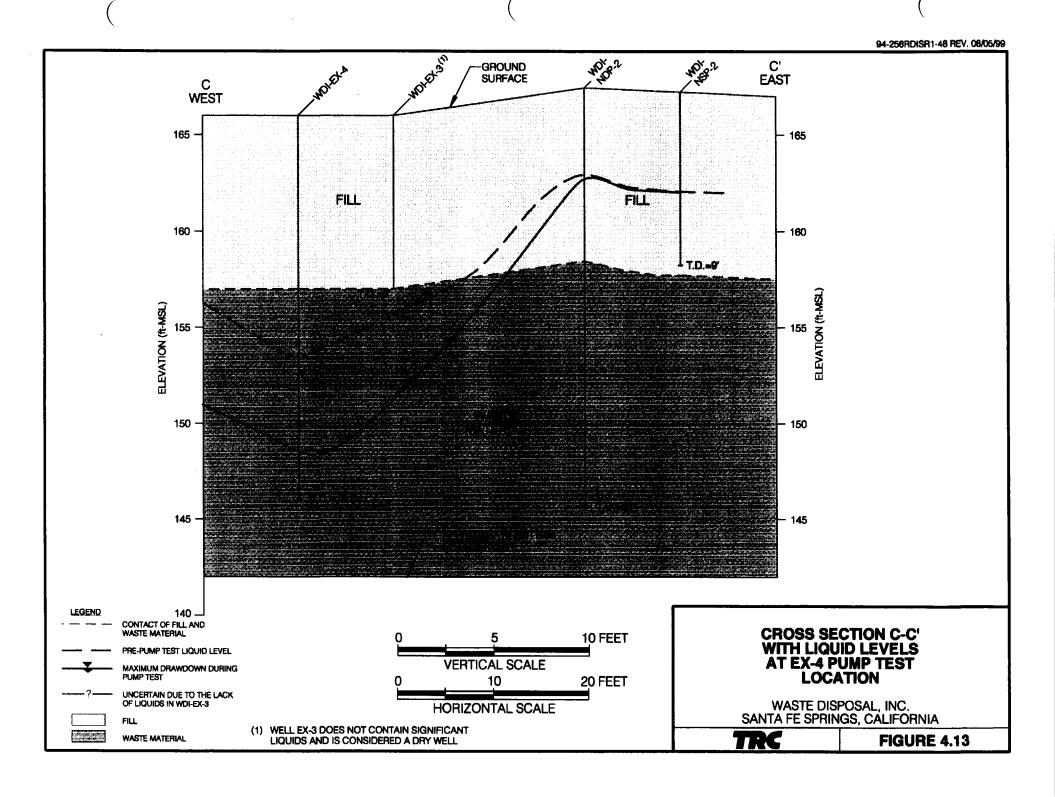
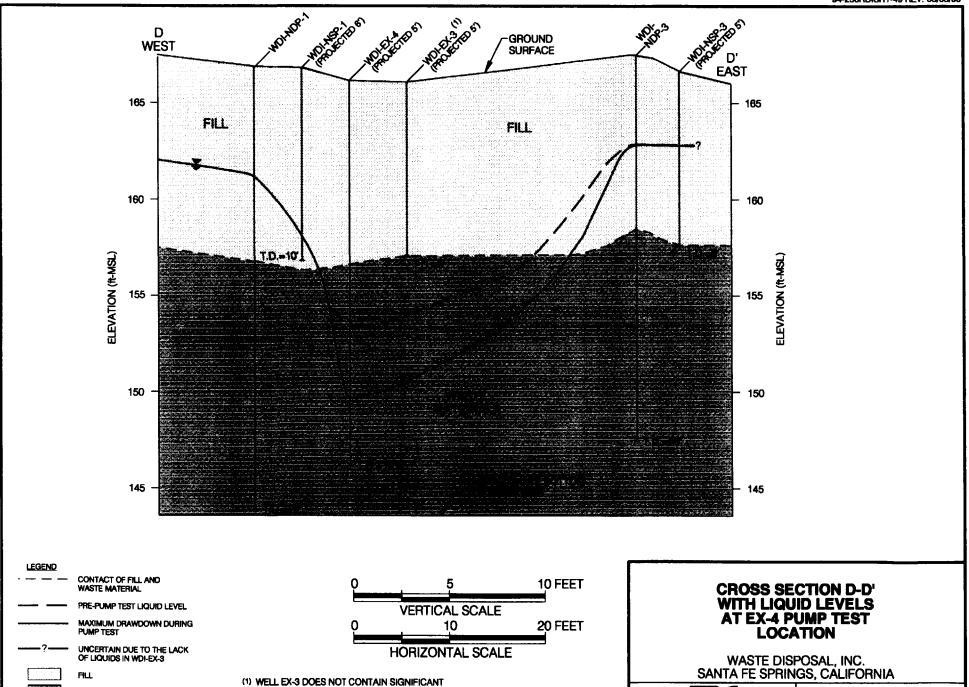


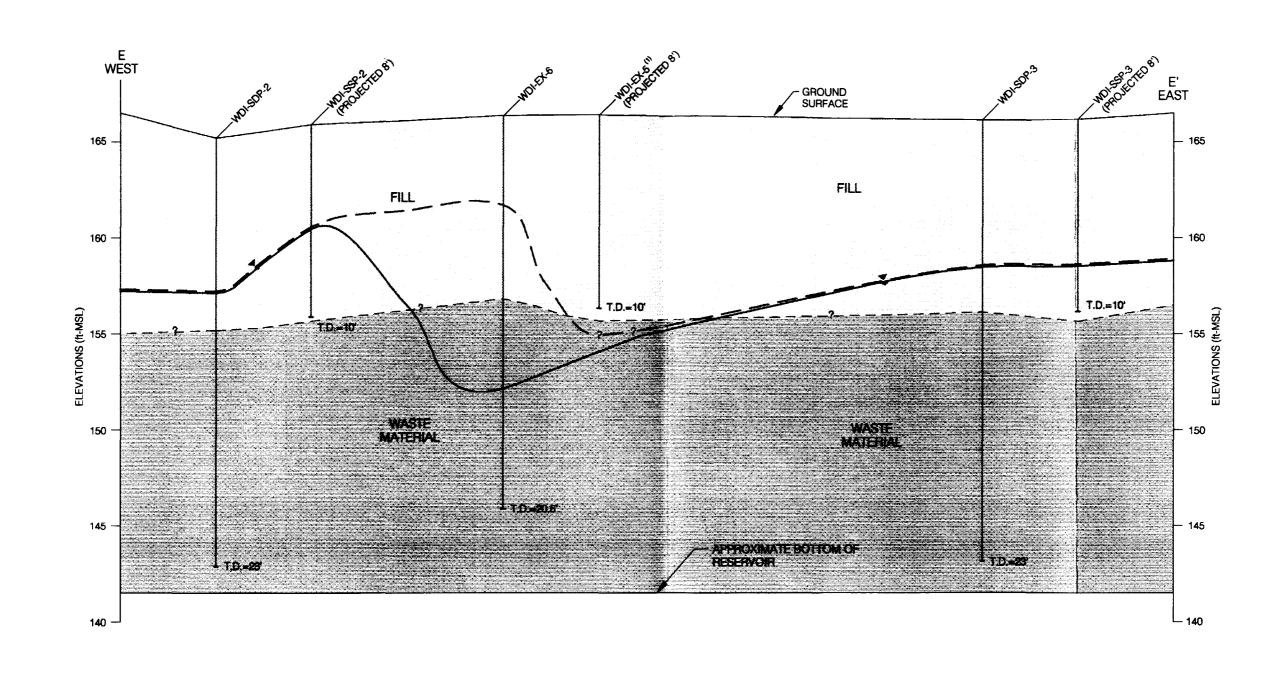


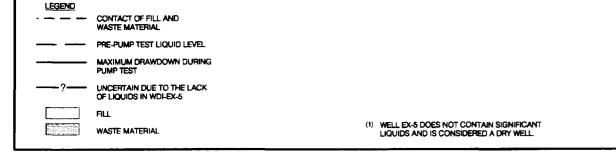
FIGURE 4.14

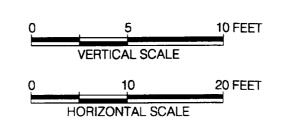


LIQUIDS AND IS CONSIDERED A DRY WELL.

WASTE MATERIAL



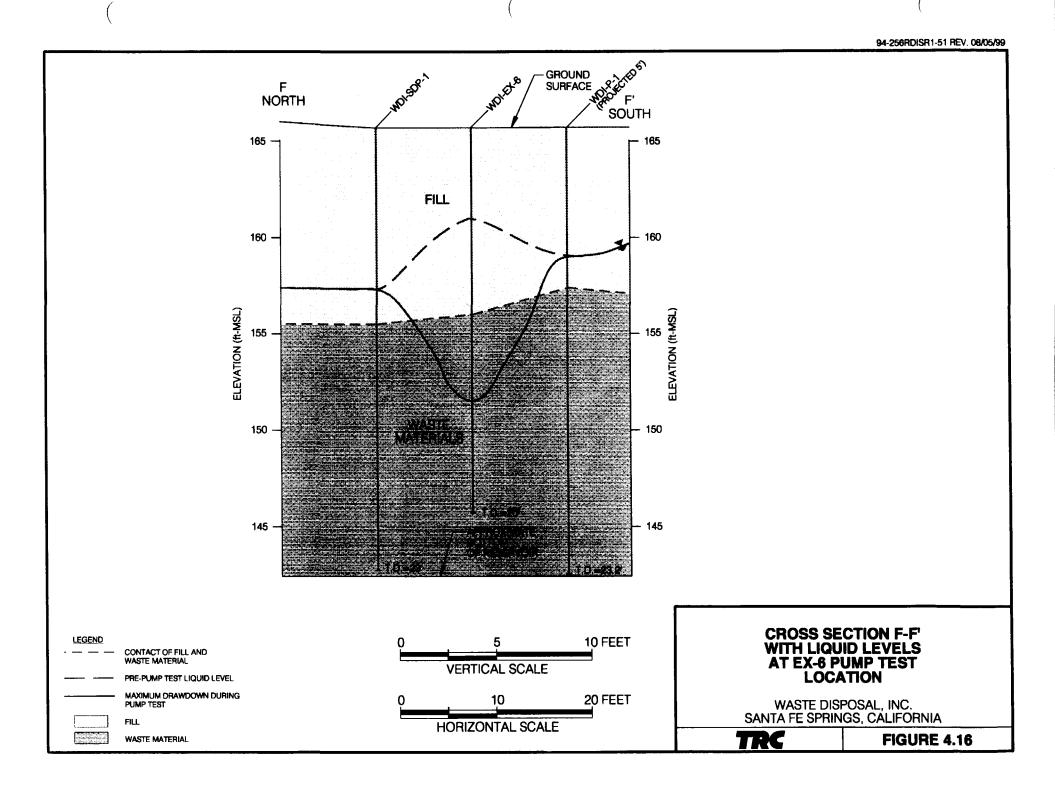


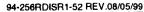


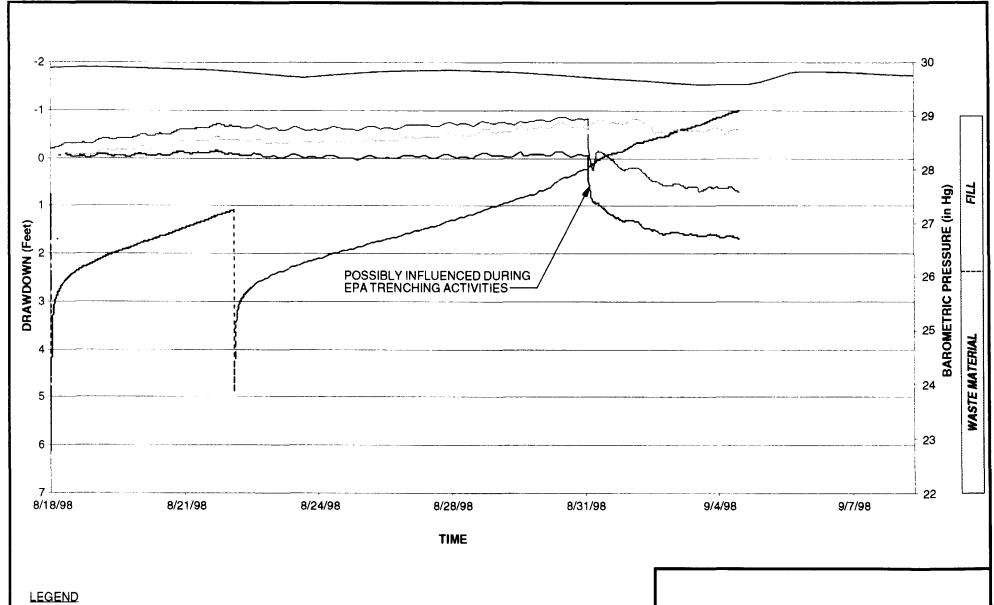
CROSS SECTION E-E'
WITH LIQUID LEVELS
AT EX-6 PUMP TEST
LOCATION

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC







---- EX-4 - NDP-1

--- NDP-2

NDP-3

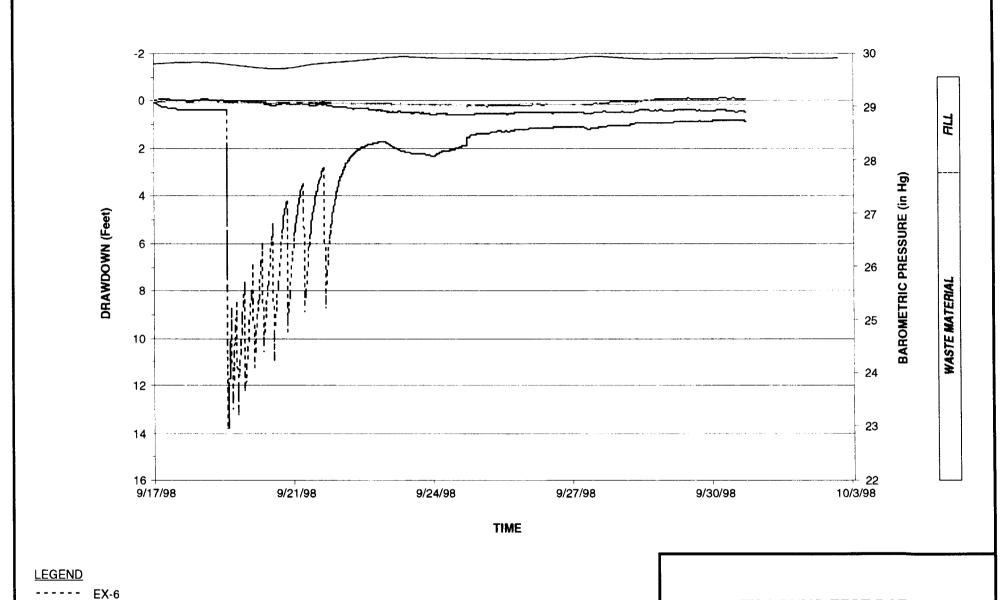
- BAROMETRIC PRESSURE

EX-4 PUMP TEST DATA

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC





----- SDP-1 ----- SDP-2

SDP-3

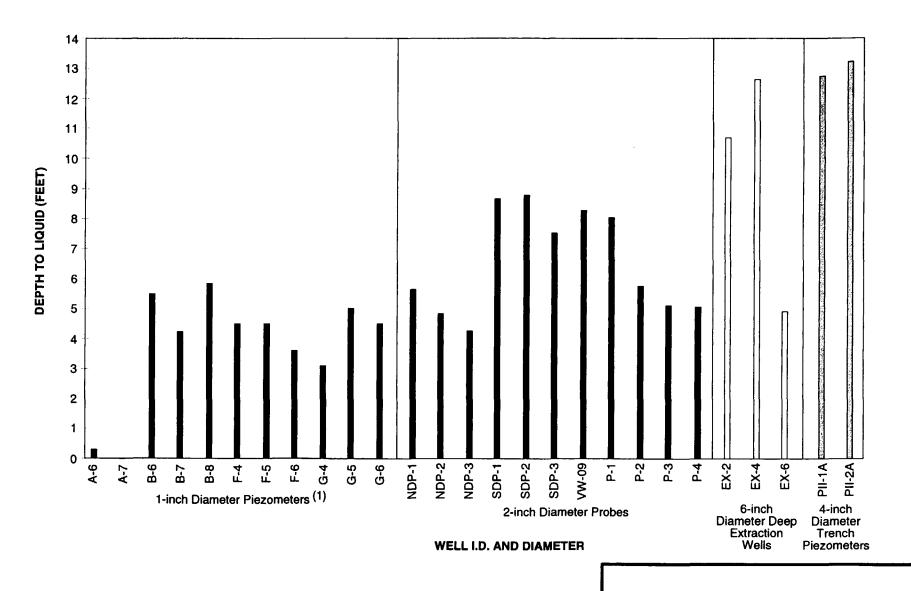
BAROMETRIC PRESSURE

EX-6 PUMP TEST DATA

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC



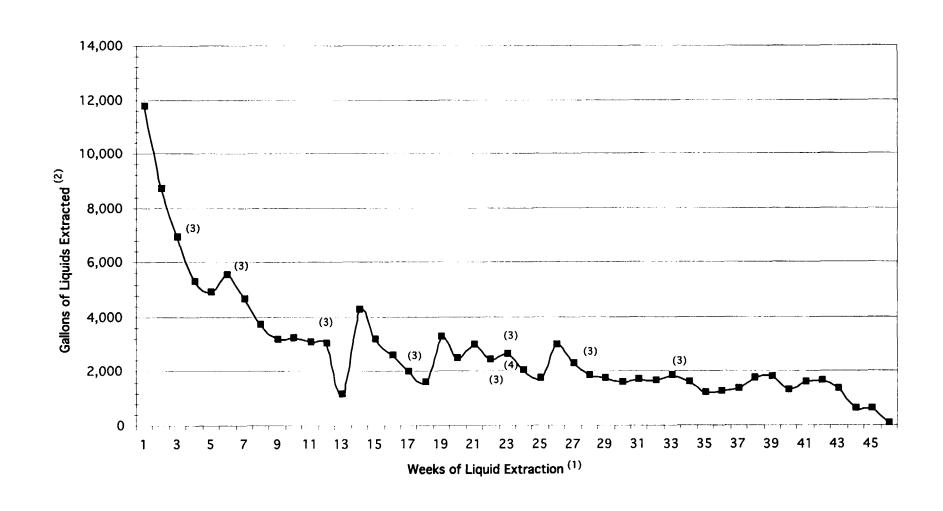


(1) 1-INCH PIEZOMETERS INSTALLED BY EPA, LOCATED WITHIN A 50-FOOT RADIUS OF PUMP TEST AREAS.

LIQUID LEVELS VERSUS DIAMETER OF WELL

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC



Note

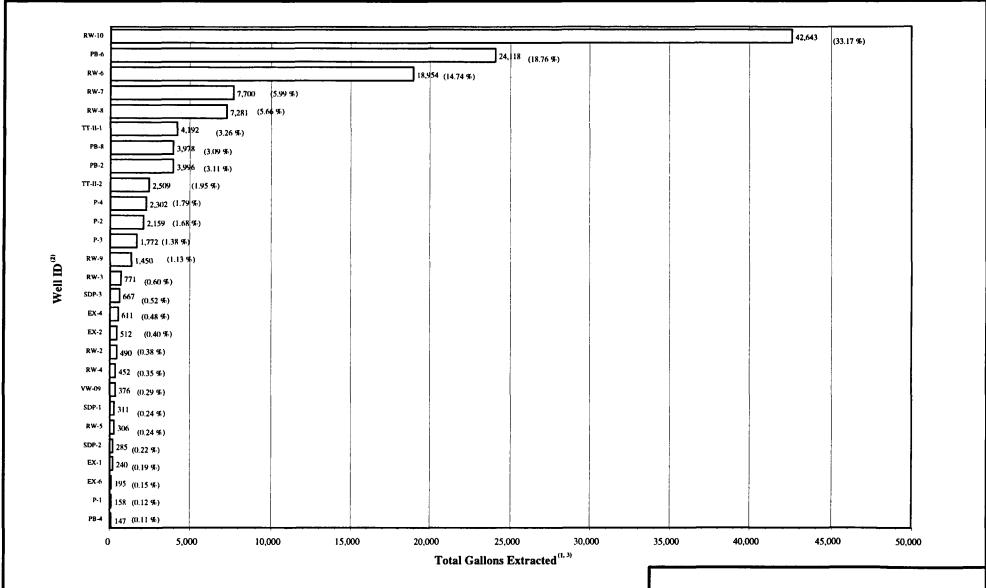
- (1) Based on number of days of system operation divided by 7 days to get weekly numbers. Does not include days system was shutdown.
- (2) Does not include a total of approximately 800 gallons of oil extracted since system startup.
- (3) System was shutdown to monitor well recovery during week.
- (4) Seven additional wells were placed online.
- (5) Received EPA approval and system was shutdown on June 2, 2000.

RESERVOIR LIQUIDS EXTRACTION PER WEEK DURING SYSTEM OPERATION⁽⁵⁾

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 4.19B



Note:

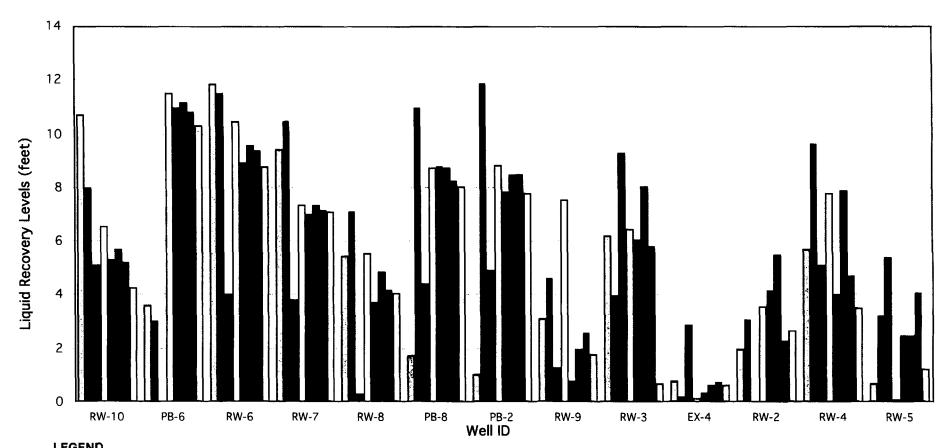
- (1) A total of approximately 800 gallons of oil have been extracted since system startup.
- (2) Reservoir wells TT-II-1, TT-II-2, EX-2, and PB-4 were abandoned on January 10, 2000 as part of EPA approved Addendum No. 2 to TM 13 activities.
- (3) Number in parenthesis is percent of total volume of liquids.
- (4) Received EPA approval and system was shutdown on June 2, 2000.

TOTAL VOLUME OF LIQUIDS EXTRACTED PER WELL AS OF JUNE 2, 2000⁽⁴⁾

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 4.19C



LEGEND

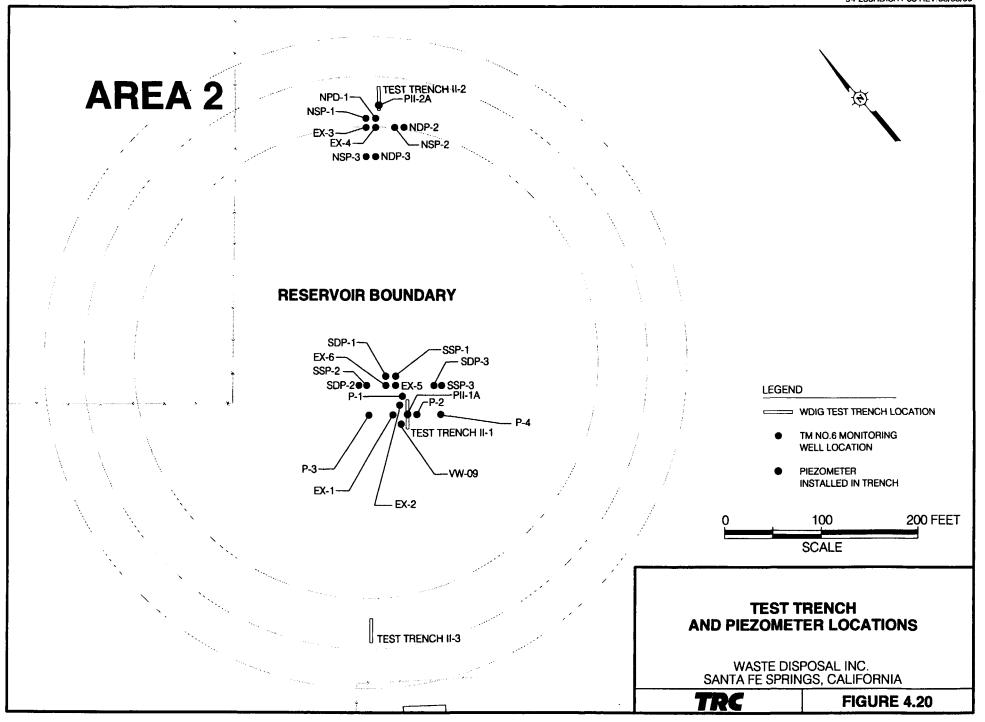
- ☐ Amount Recovered after first recovery period (3 days)
- Amount Recovered after second recovery period (4 days)
- Amount Recovered after third recovery period (4 days)
- ☐ Amount Recovered after fourth recovery period (10 days)
- Amount Recovered after fifth recovery period (3 days)
- Amount Recovered after sixth recovery period (7 days)
- Amount Recovered after seventh recovery period (7 days)
- ☐ Amount Recovered after eighth recovery period (10 days)

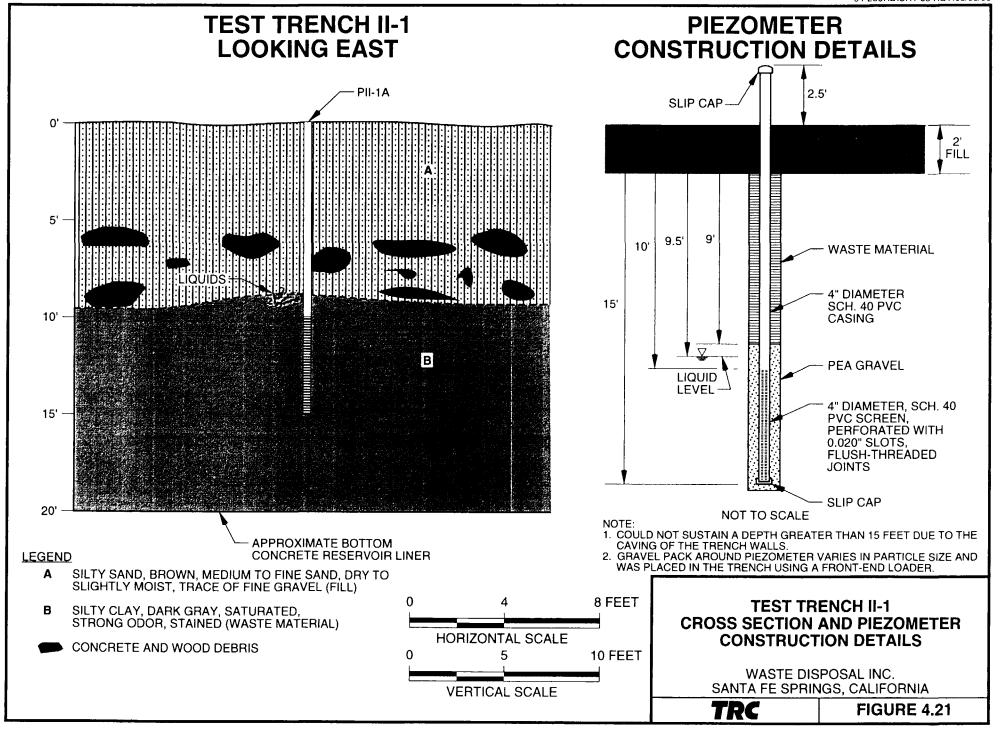
LIQUID RECOVERY LEVELS PER WELL

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

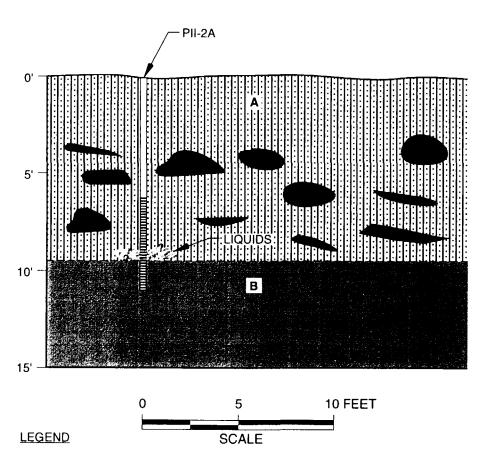
TRC

FIGURE 4.19D





TEST TRENCH II-2 LOOKING WEST



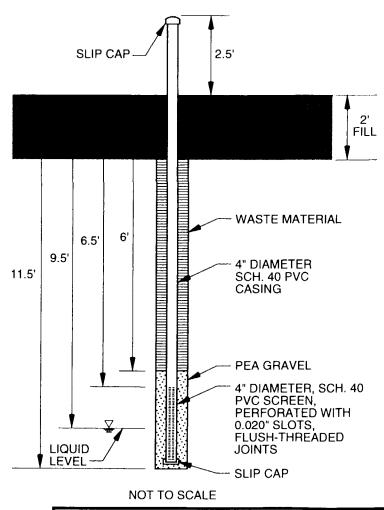
- A SILTY SAND, BROWN, MEDIUM-FINE GRAINED, DRY TO SLIGHTLY MOIST, NO ODOR, NO STAINING (FILL)
- B SILTY CLAY, BLACK TO OLIVE GREEN, SATURATED, STRONG ODOR, STAINED, MOIST (WASTE MATERIAL)

CONCRETE AND WOOD DEBRIS

NOTE:

- COULD NOT SUSTAIN A DEPTH GREATER THAN 15' DUE TO CAVING OF THE TRENCH WALLS.
- 2. LIQUID ENCOUNTERED AT 9.5'.
- WIDTH OF TRENCH IS 8' ACROSS THE CENTER DUE TO MATERIALS CAVING FROM TRENCH WALLS.
- 4. GRAVEL PACK AROUND PIEZOMETER VARIES IN PARTICLE SIZE AND WAS PLACED IN THE TRENCH USING A FRONT-END LOADER.

PIEZOMETER CONSTRUCTION DETAILS



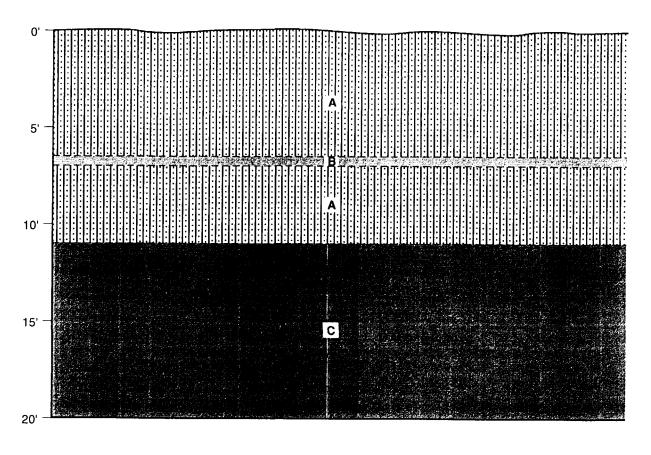
TEST TRENCH II-2 CROSS SECTION AND PIEZOMETER CONSTRUCTION DETAILS

WASTE DISPOSAL INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 4.22

TEST TRENCH II-3 LOOKING EAST



LEGEND

- A SILTY SAND, BROWN, FINE TO MEDIUM GRAINED, TRACE OF GRAVEL, DRY (FILL)
- B THIN FRACTURED CONCRETE LAYER (~6" THICK)
- C SILTY CLAY, BLACK TO OLIVE GREEN, SATURATED, STRONG ODOR, MOIST (WASTE MATERIAL)

NOTE

1. COULD NOT SUSTAIN A DEPTH GREATER THAN 14 FEET DUE TO CAVING OF THE TRENCH WALLS.

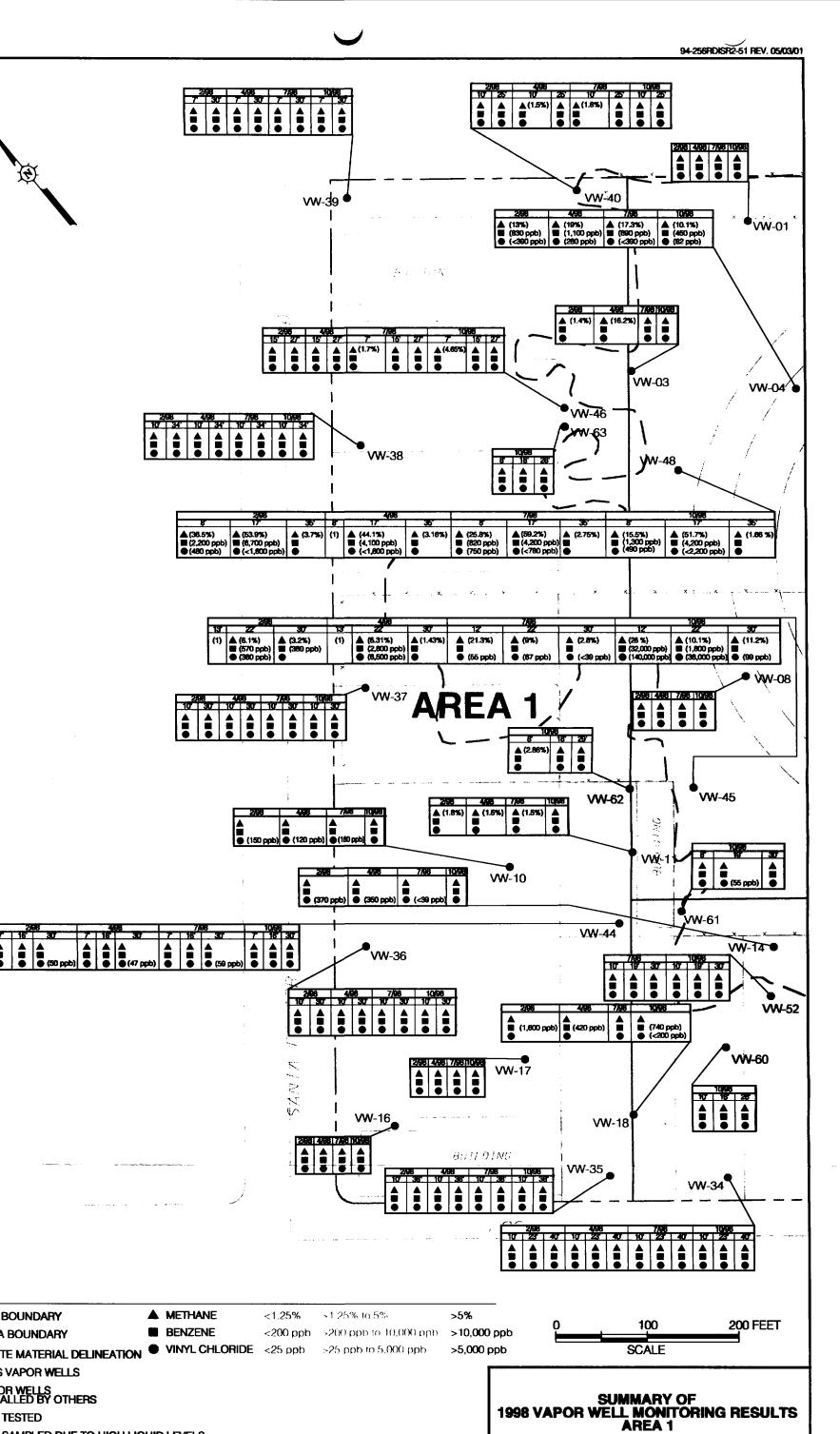


TEST TRENCH II-3 CROSS SECTION

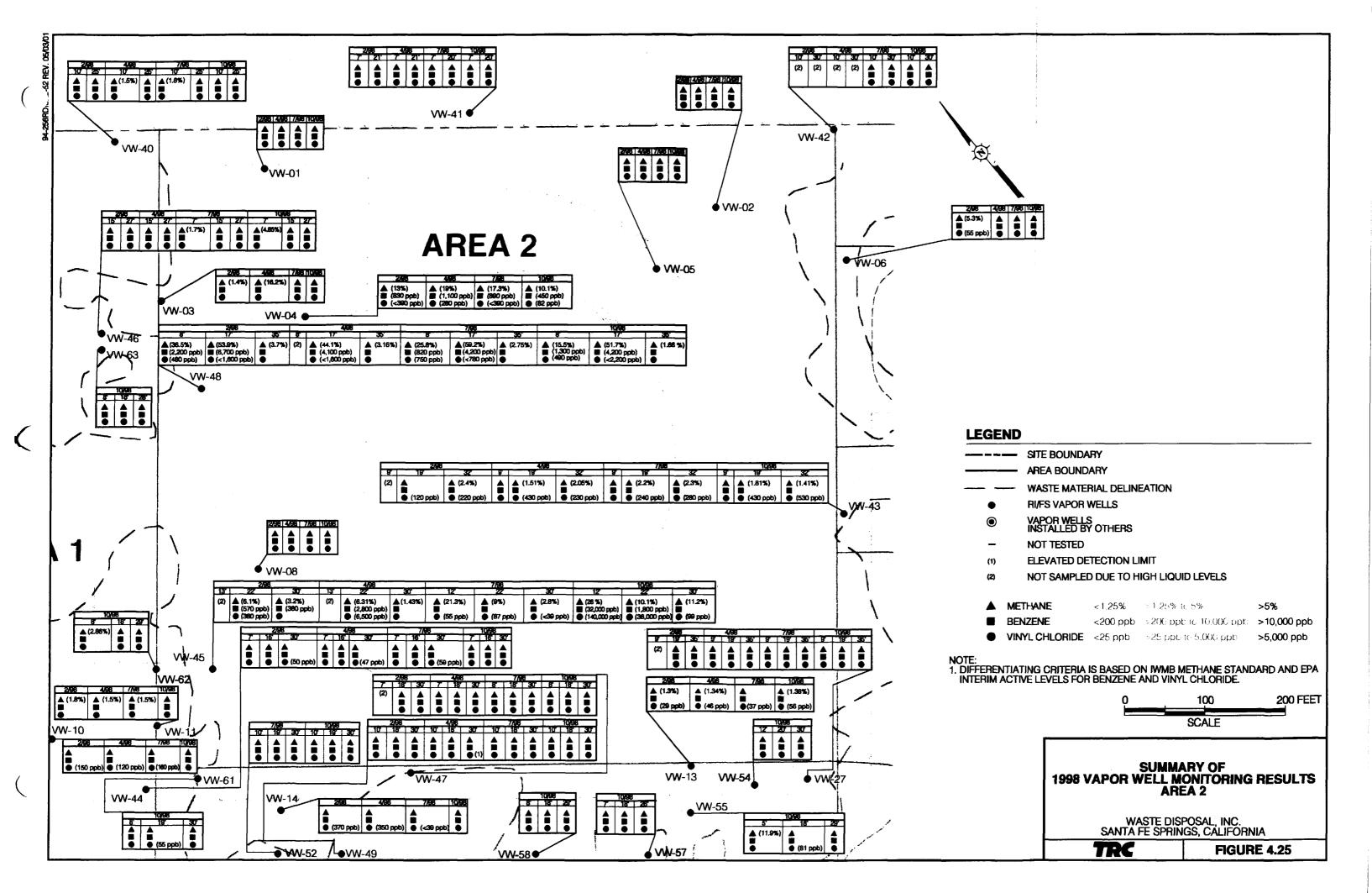
WASTE DISPOSAL INC. SANTA FE SPRINGS, CALIFORNIA

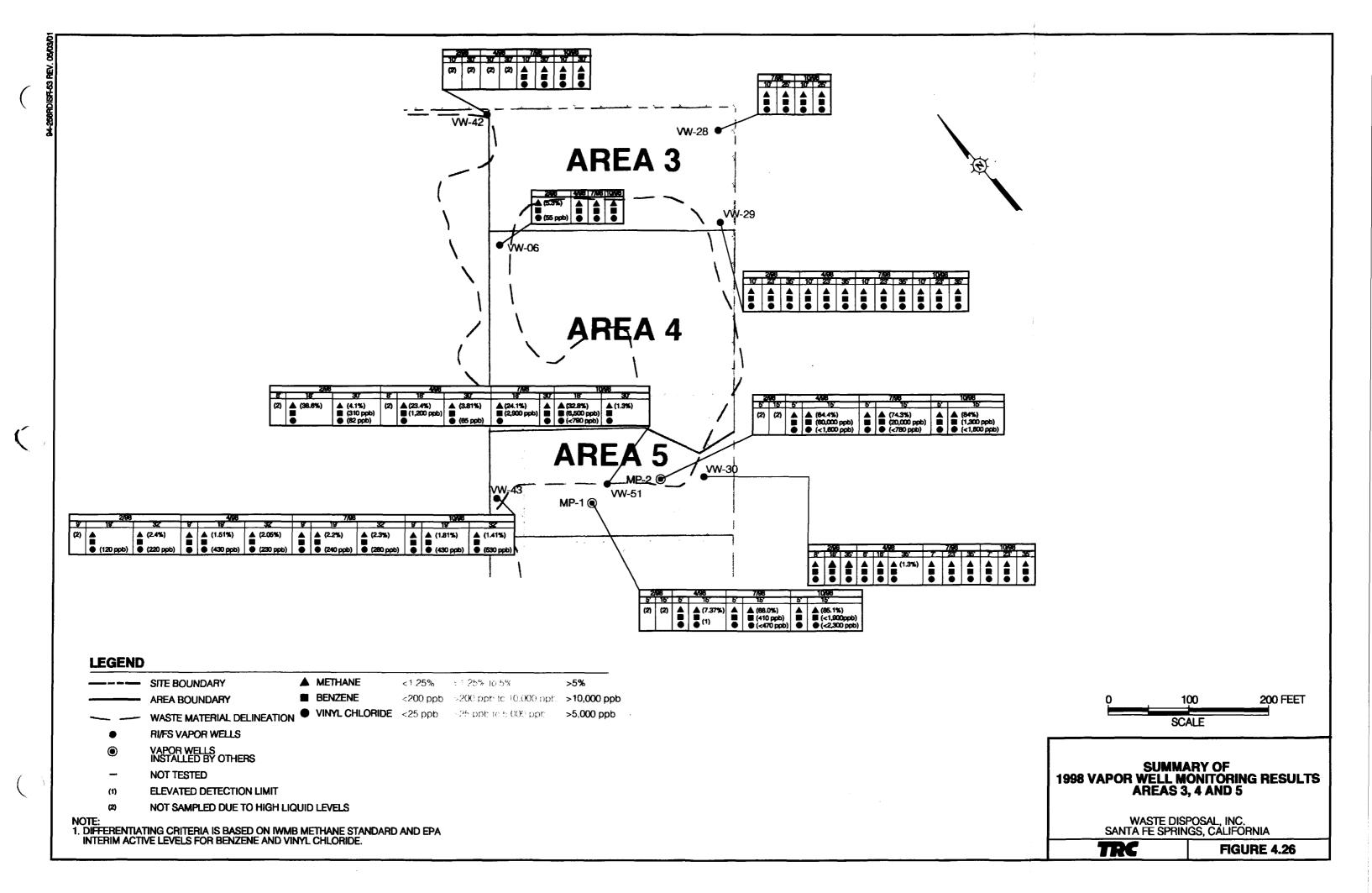
TRC

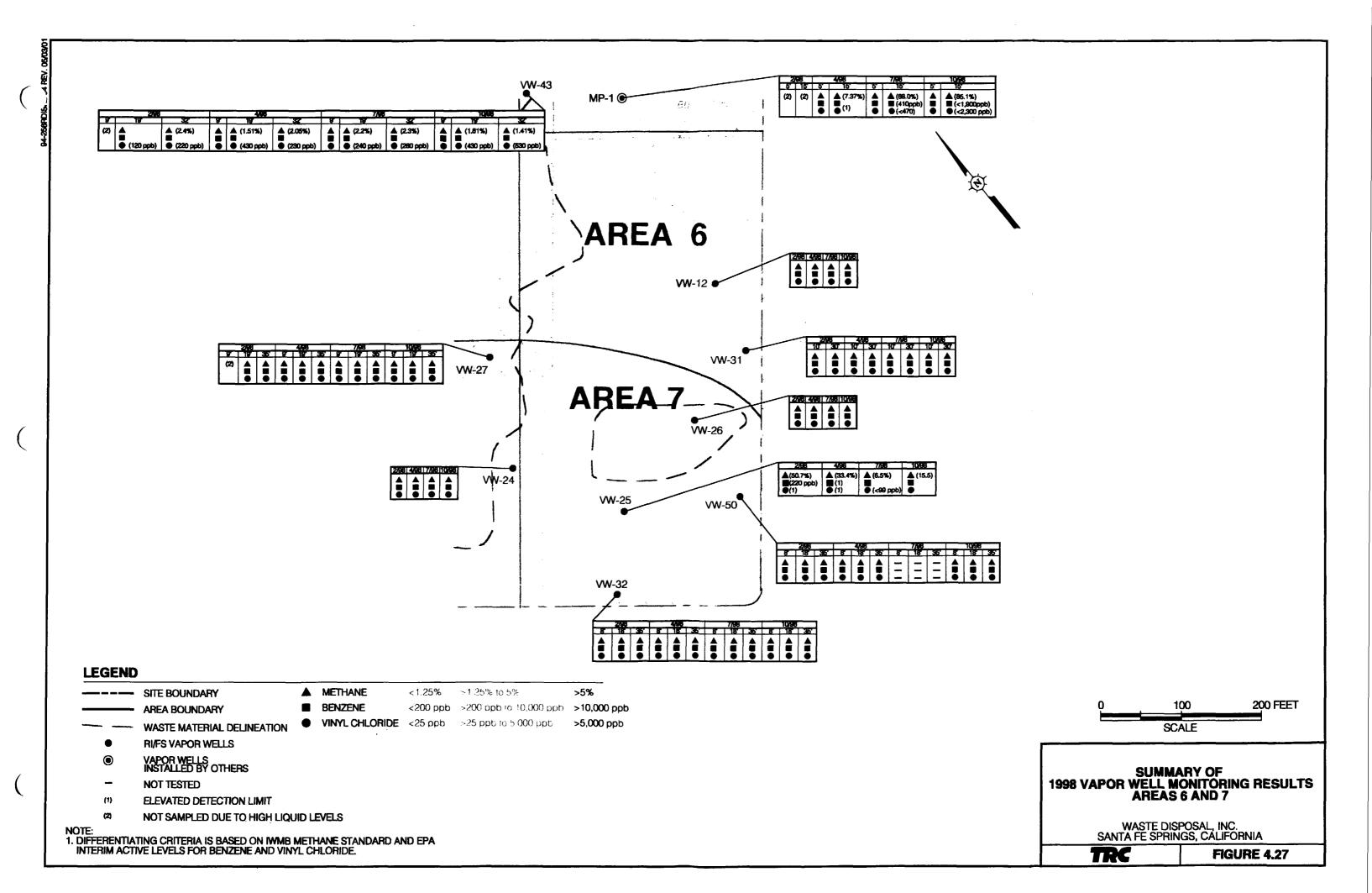
FIGURE 4.23

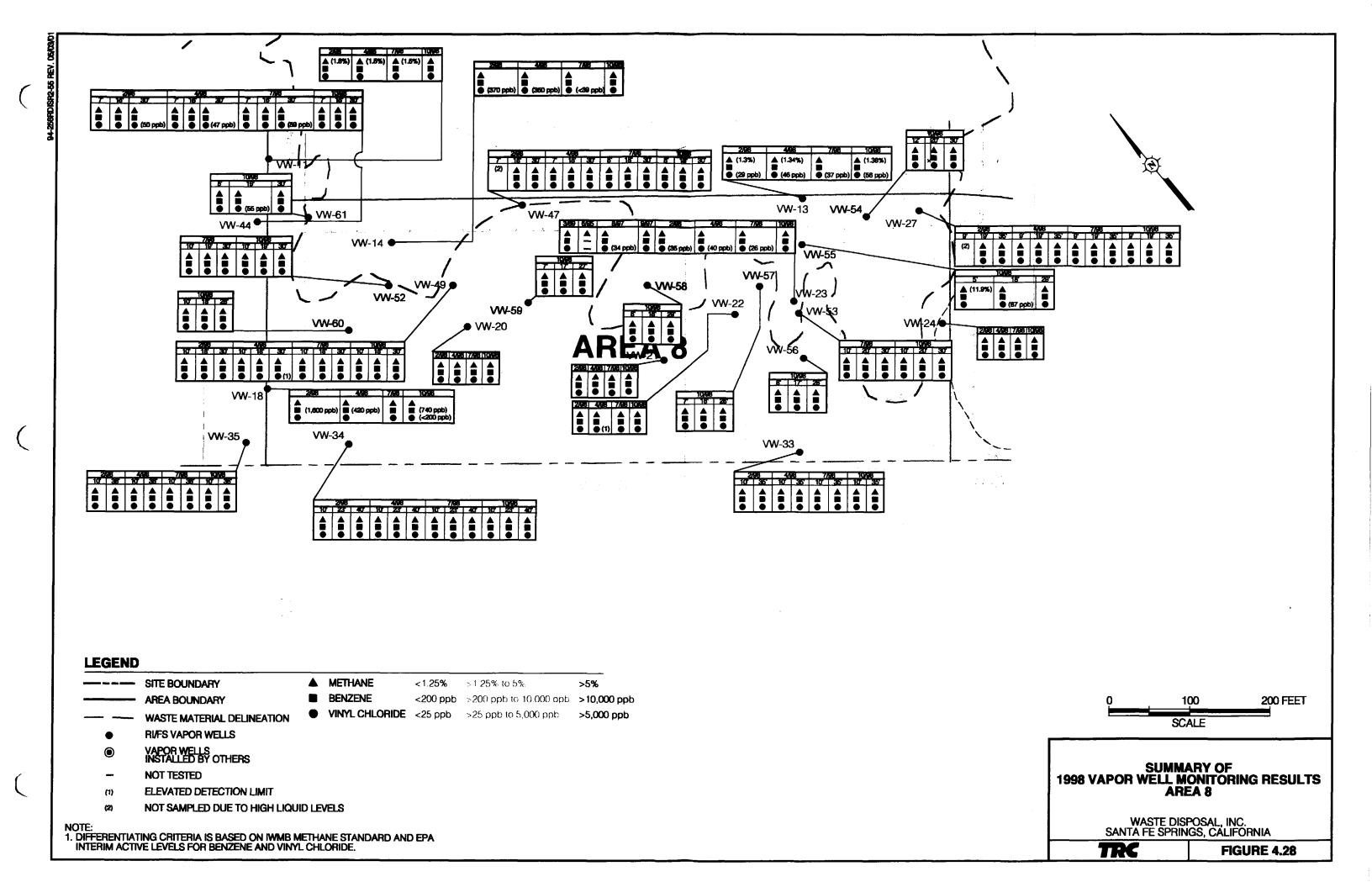


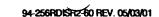
LEGEND SITE BOUNDARY **AREA BOUNDARY** WASTE MATERIAL DELINEATION RI/FS VAPOR WELLS VAPOR WELLS INSTALLED BY OTHERS ◉ **NOT TESTED** NOT SAMPLED DUE TO HIGH LIQUID LEVELS (1) WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA DIFFERENTIATING CRITERIA IS BASED ON IMMB METHANE STANDARD AND EPA INTERIM ACTIVE LEVELS FOR BENZENE AND VINYL CHLORIDE. **FIGURE 4.24**

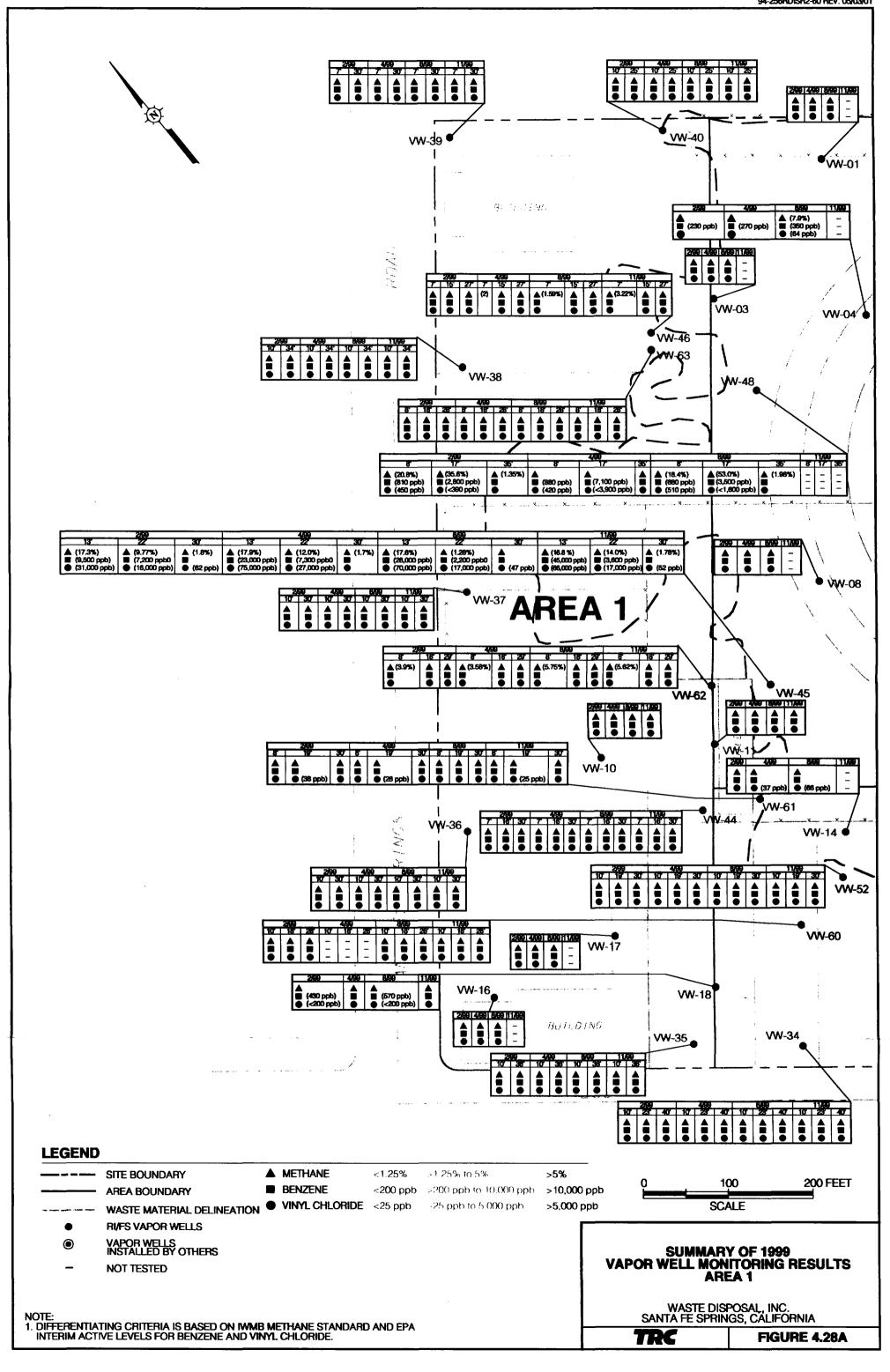


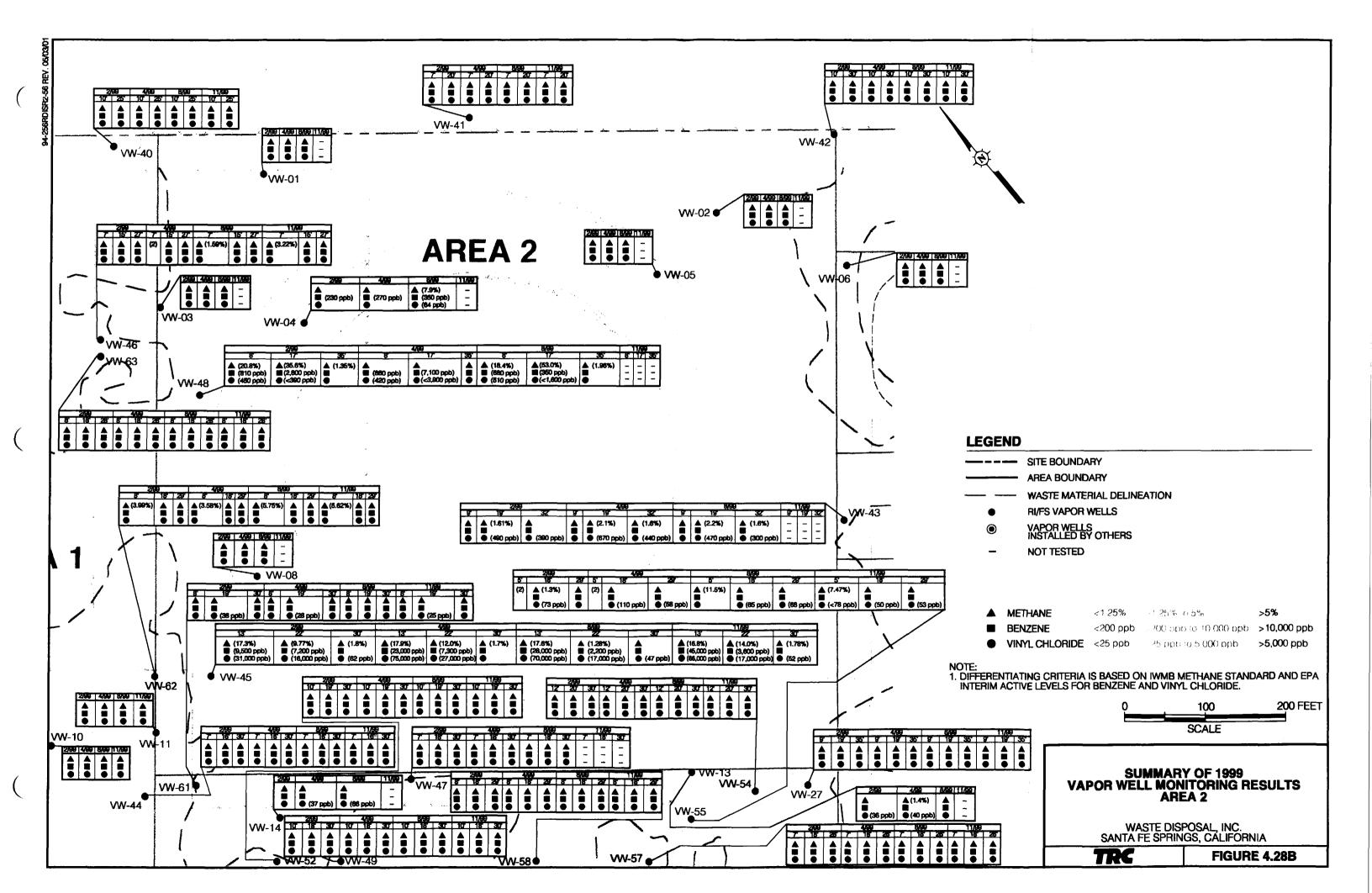


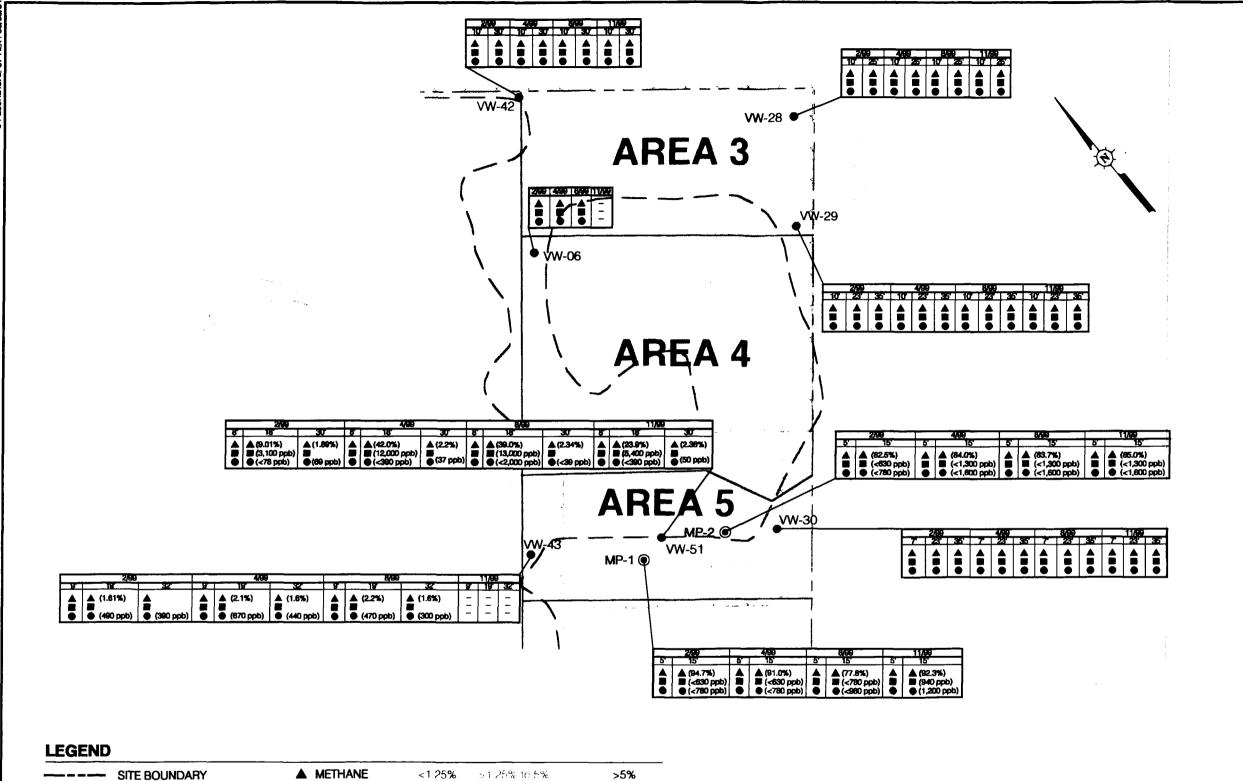












AREA BOUNDARY

■ BENZENE

<200 ppb →200 ppc to 10 000 ppb >10,000 ppb

WASTE MATERIAL DELINEATION ● VINYL CHLORIDE <25 ppb >25 ppt to 5,000 ppb >5,000 ppb

RI/FS VAPOR WELLS

VAPOR WELLS INSTALLED BY OTHERS

NOT TESTED

1. DIFFERENTIATING CRITERIA IS BASED ON IWMB METHANE STANDARD AND EPA INTERIM ACTIVE LEVELS FOR BENZENE AND VINYL CHLORIDE.

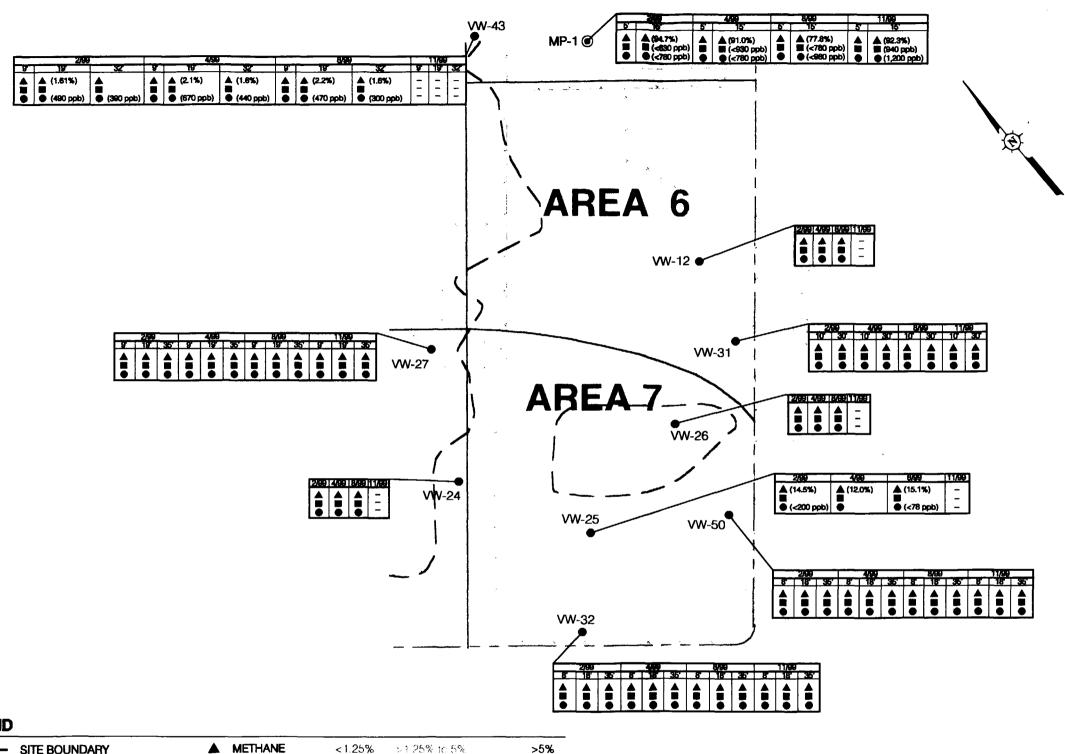


SUMMARY OF 1999 VAPOR WELL MONITORING RESULTS AREAS 3, 4 AND 5

WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 4.28C



LEGEND

--- SITE BOUNDARY

AREA BOUNDARY BENZENE

■ BENZENE <200 ppb >200 ppc to 10 000 ppb >10,000 ppb

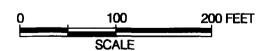
■ VINYL CHLORIDE <25 ppb >25 ppb to 5,000 ppb >5,000 ppb

WASTE MATERIAL DELINEATION
RI/FS VAPOR WELLS

VAPOR WELLS INSTALLED BY OTHERS

NOT TESTED

NOTE: 1. DIFFERENTIATING CRITERIA IS BASED ON IWMB METHANE STANDARD AND EPA INTERIM ACTIVE LEVELS FOR BENZENE AND VINYL CHLORIDE.

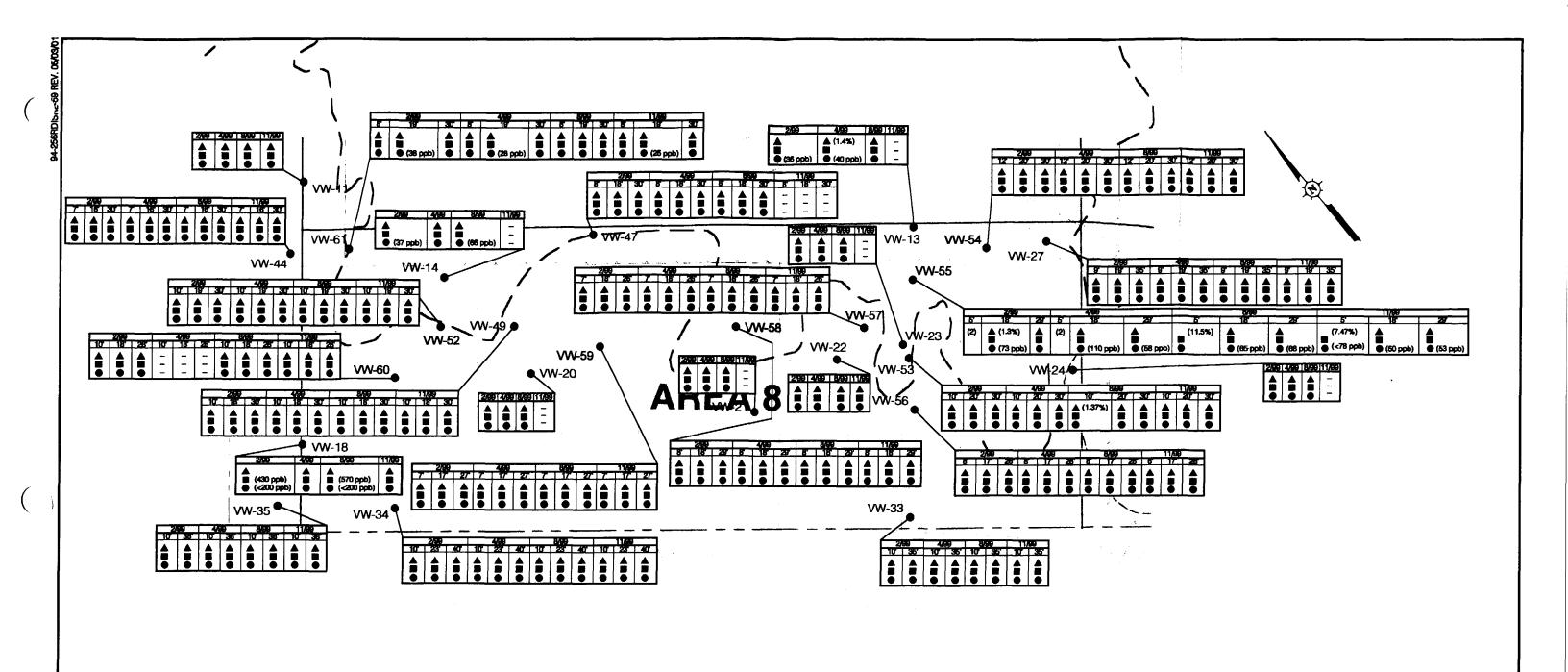


SUMMARY OF 1999 VAPOR WELL MONITORING RESULTS AREAS 6 AND 7

> WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

TRC

FIGURE 4.28D



LEGEND

--- SITE BOUNDARY

AREA BOUNDARY

--- WASTE MATERIAL DELINEATION

- RI/FS VAPOR WELLS
- VAPOR WELLS INSTALLED BY OTHERS
- NOT TESTED

NOTE:
1. DIFFERENTIATING CRITERIA IS BASED ON IWMB METHANE STANDARD AND EPA INTERIM ACTIVE LEVELS FOR BENZENE AND VINYL CHLORIDE.

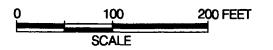
▲ METHANE

BENZENE

<1.25% >1.25% to 5%

● VINYL CHLORIDE <25 ppb ⇒25 ppb to 5,000 ppb

<200 ppb >200 ppb to 10 000 ppb >10,000 ppb

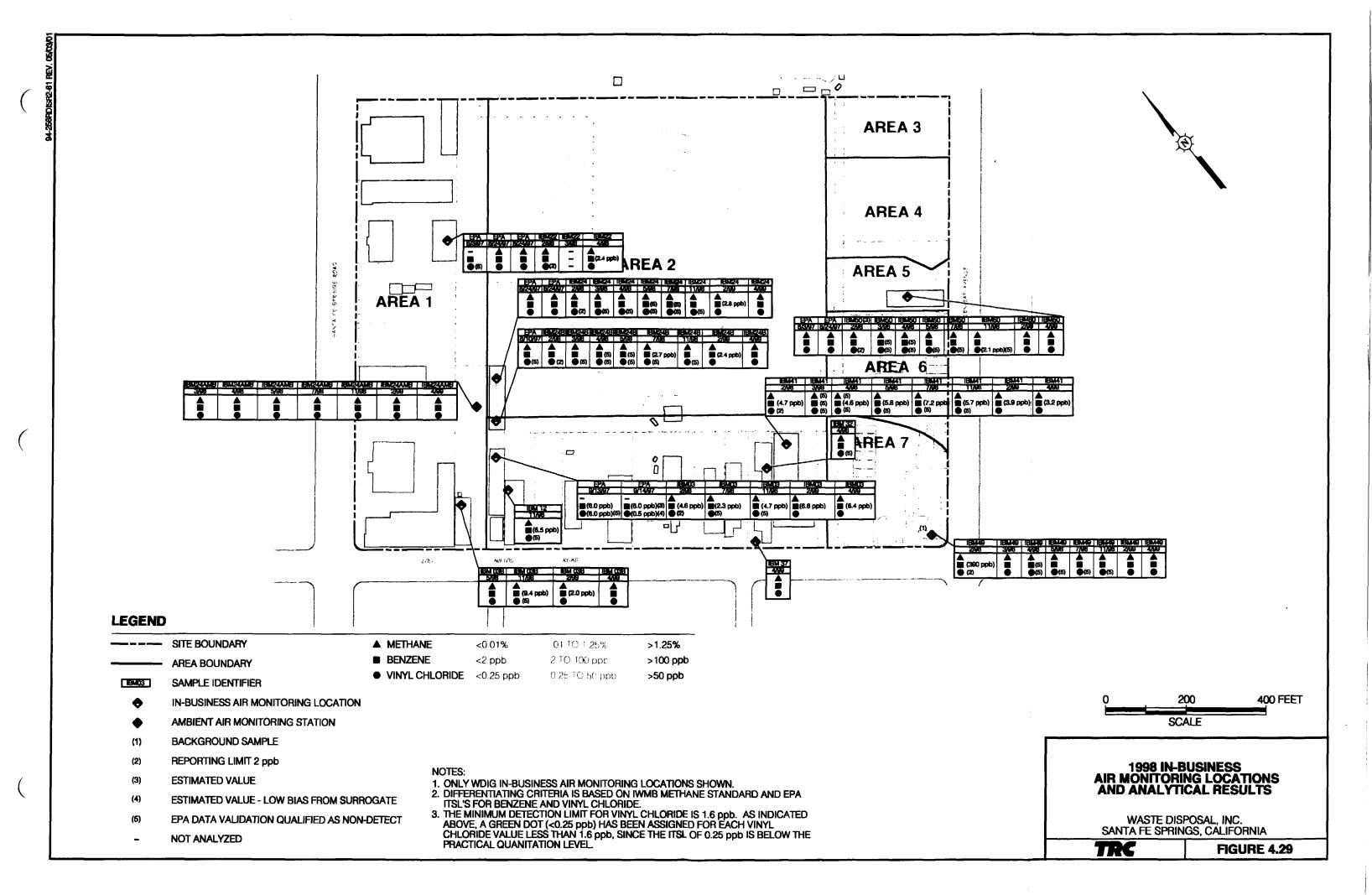


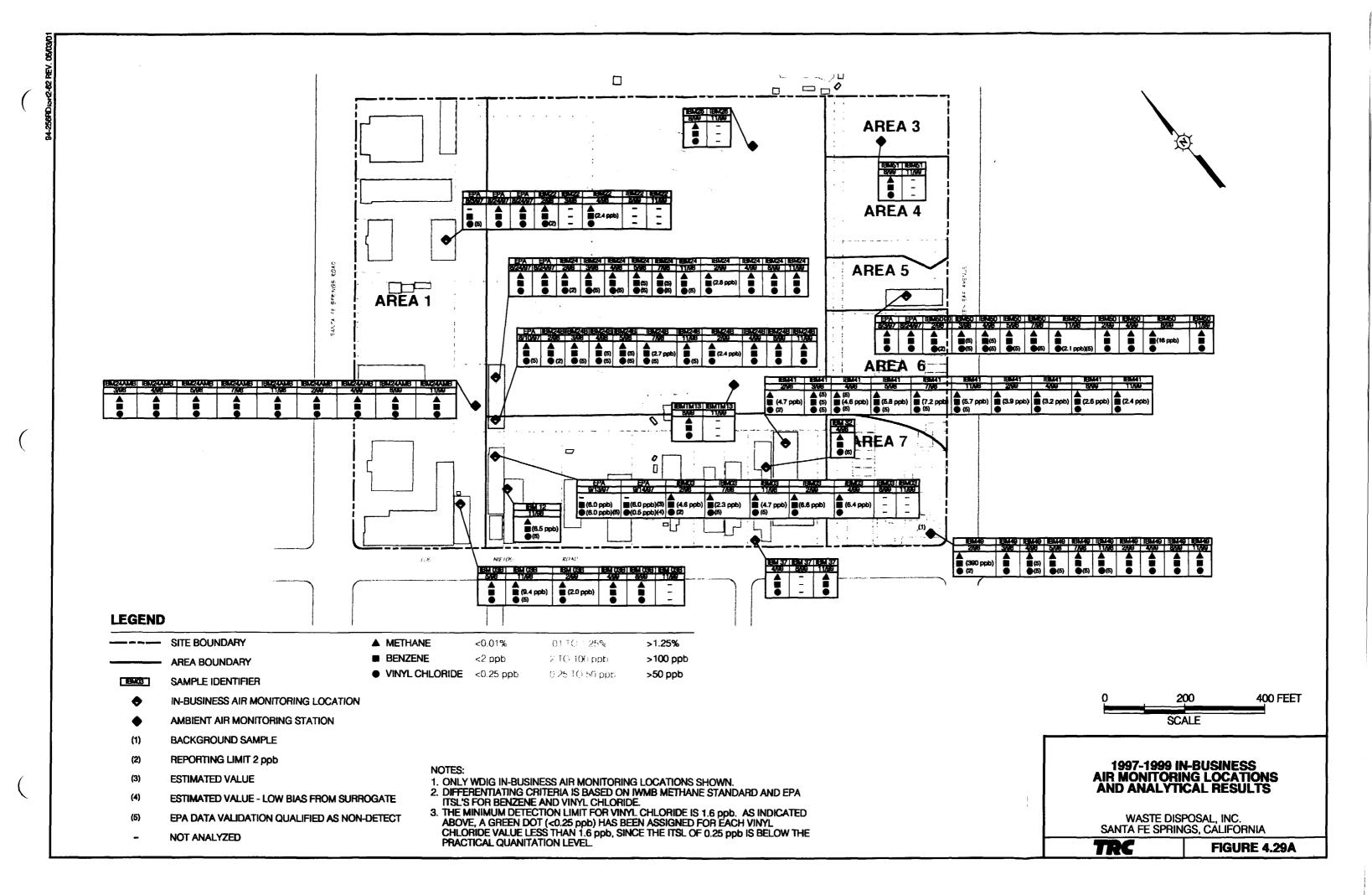
SUMMARY OF 1999 VAPOR WELL MONITORING RESULTS AREA 8

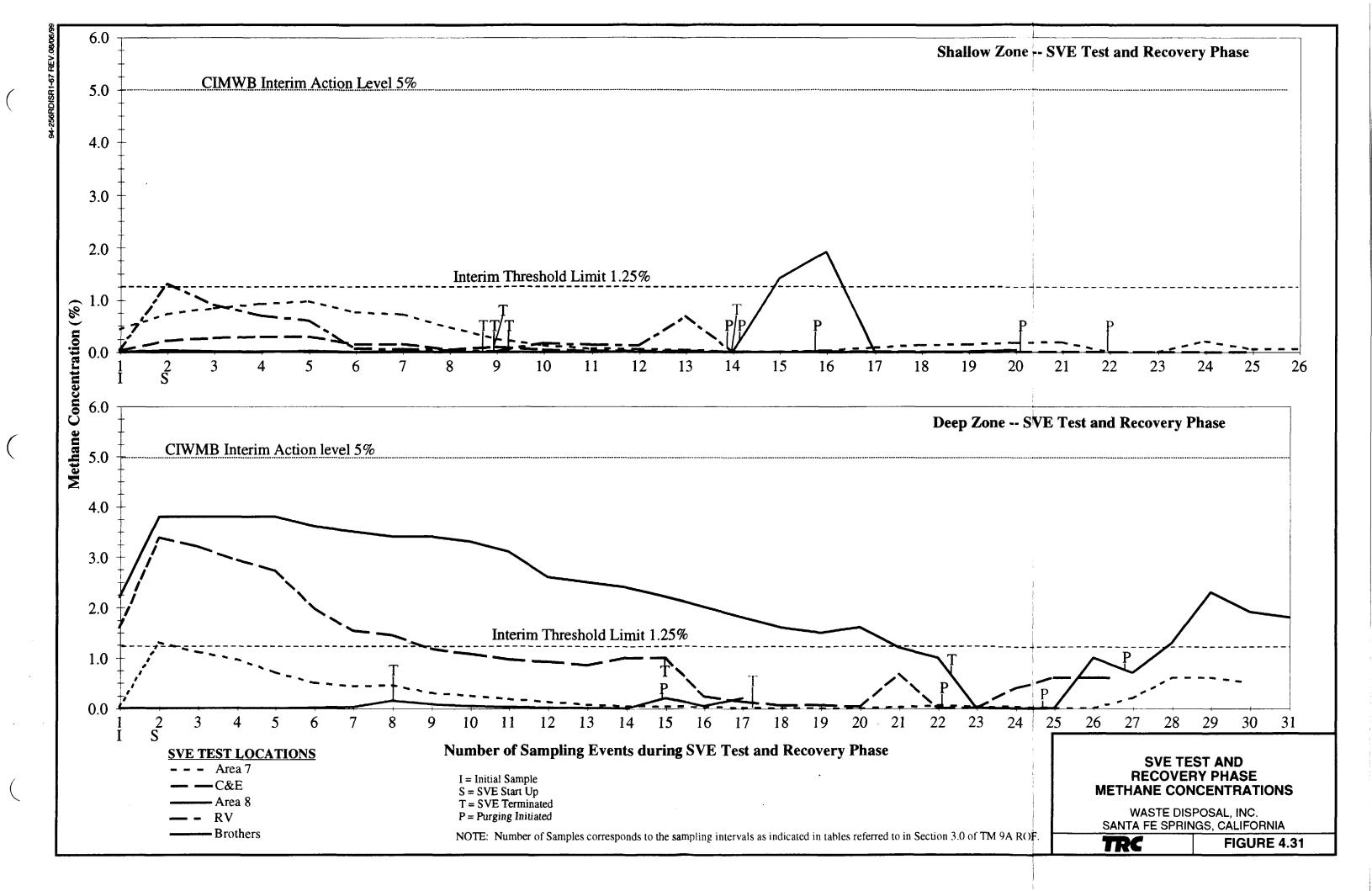
> WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

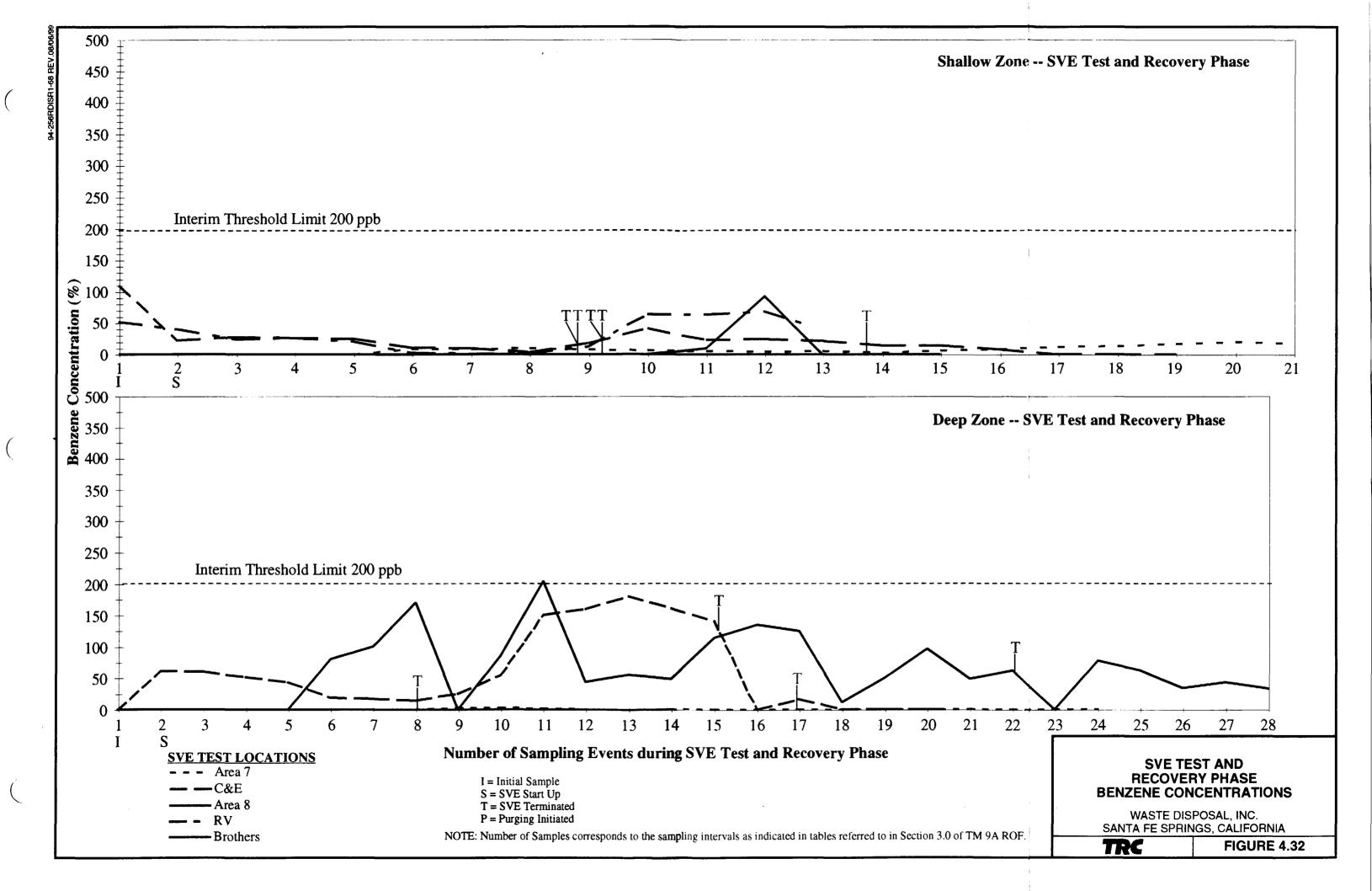
TRC

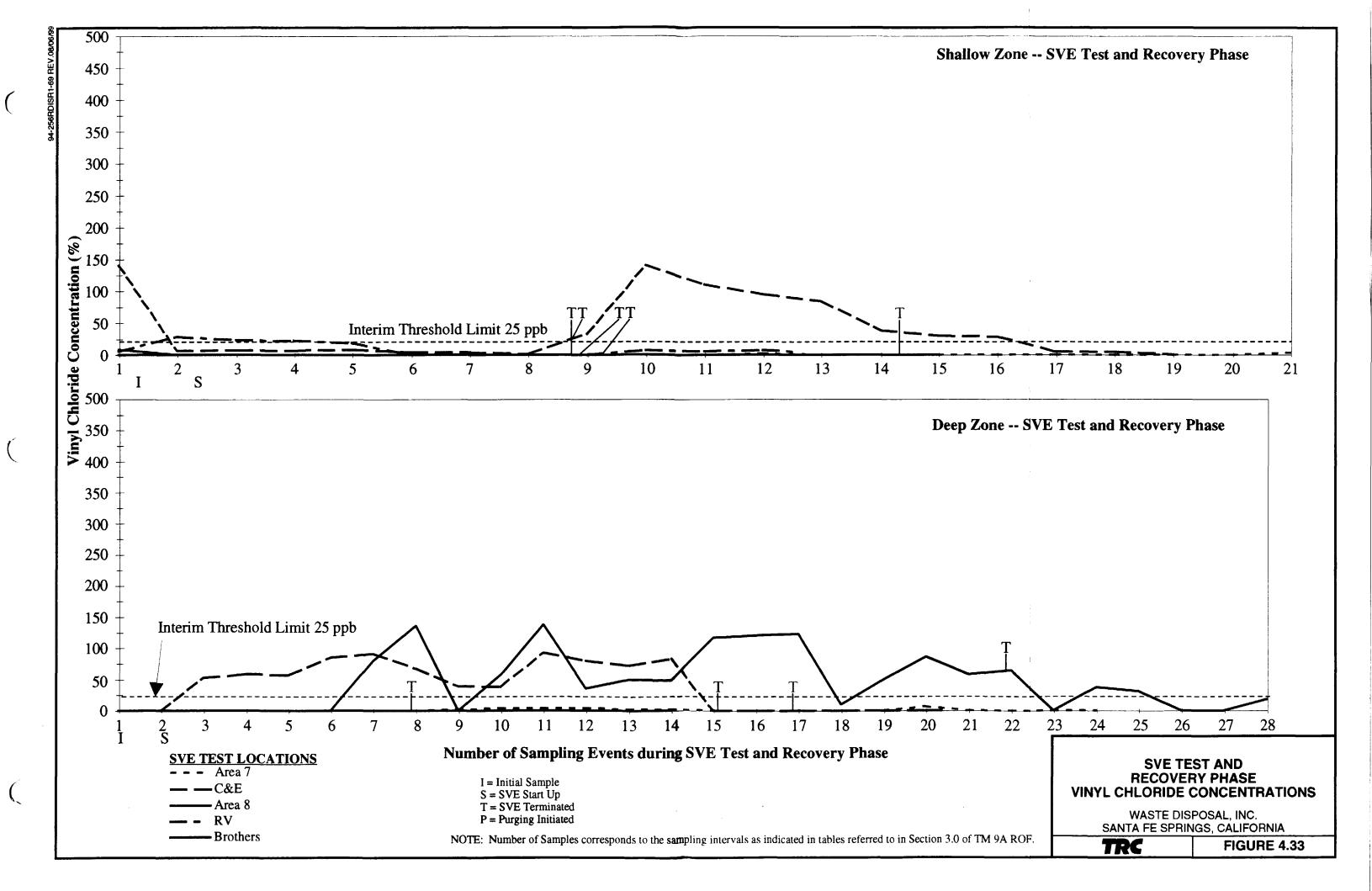
FIGURE 4.28E

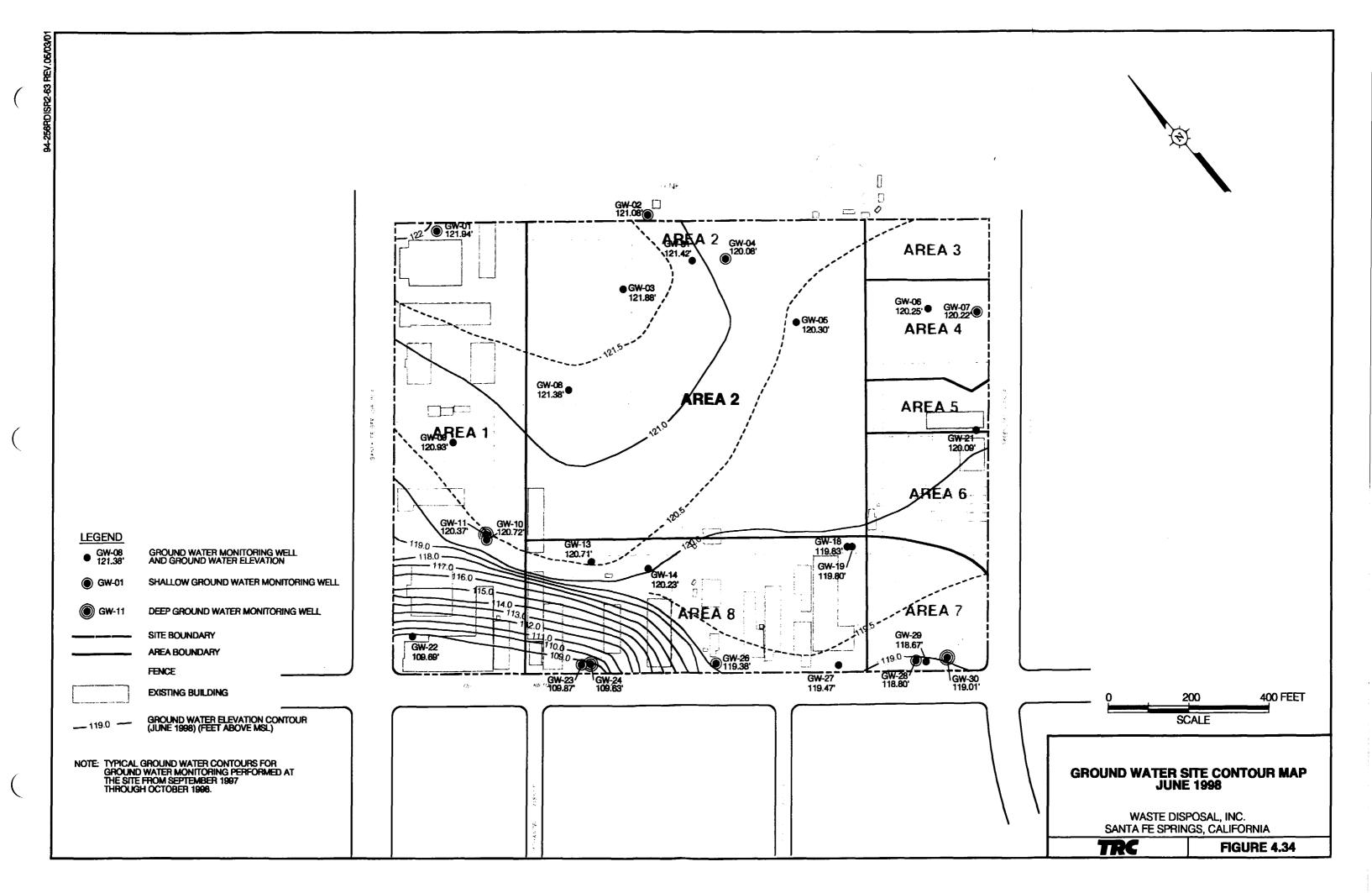


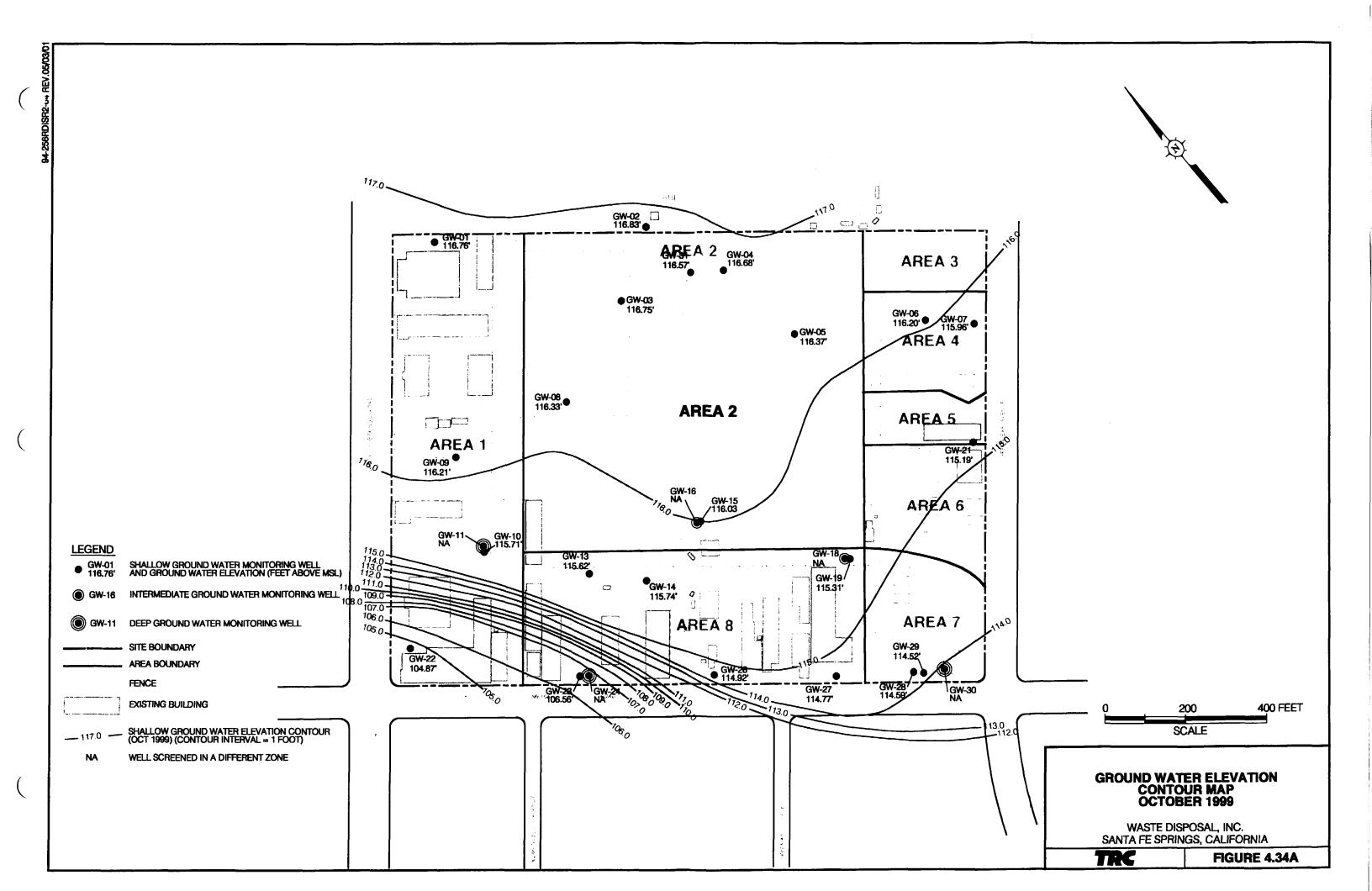


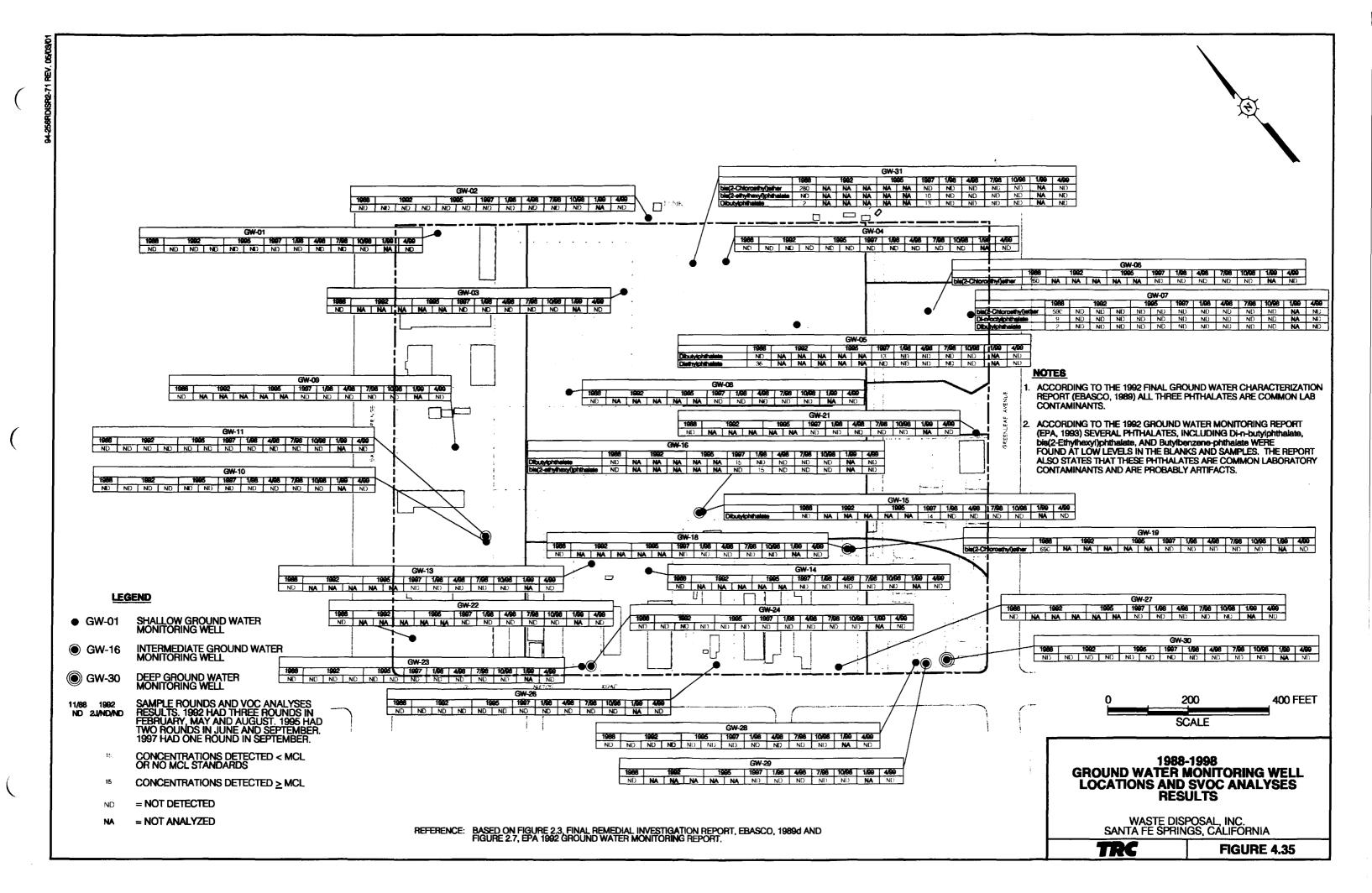


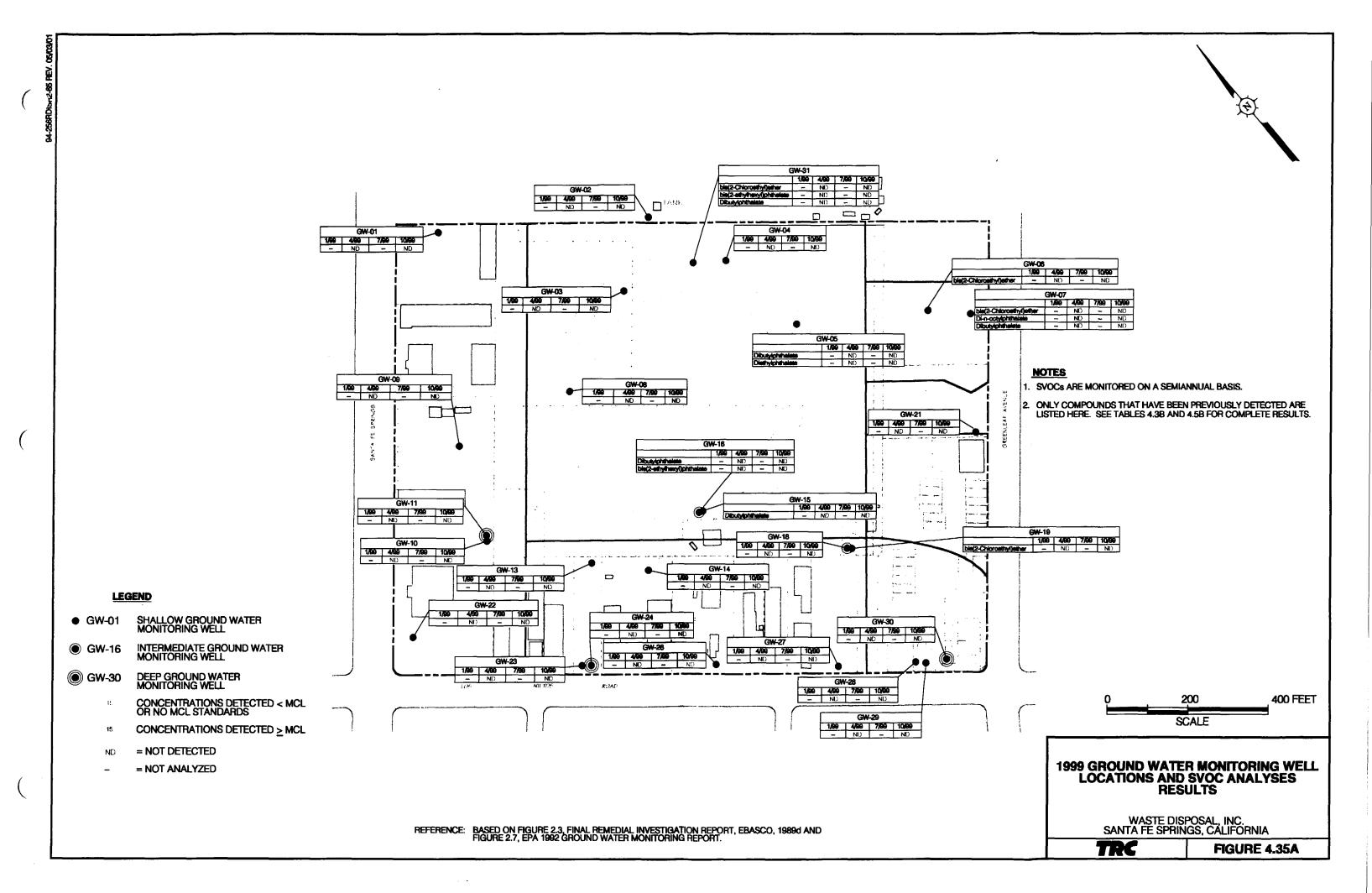


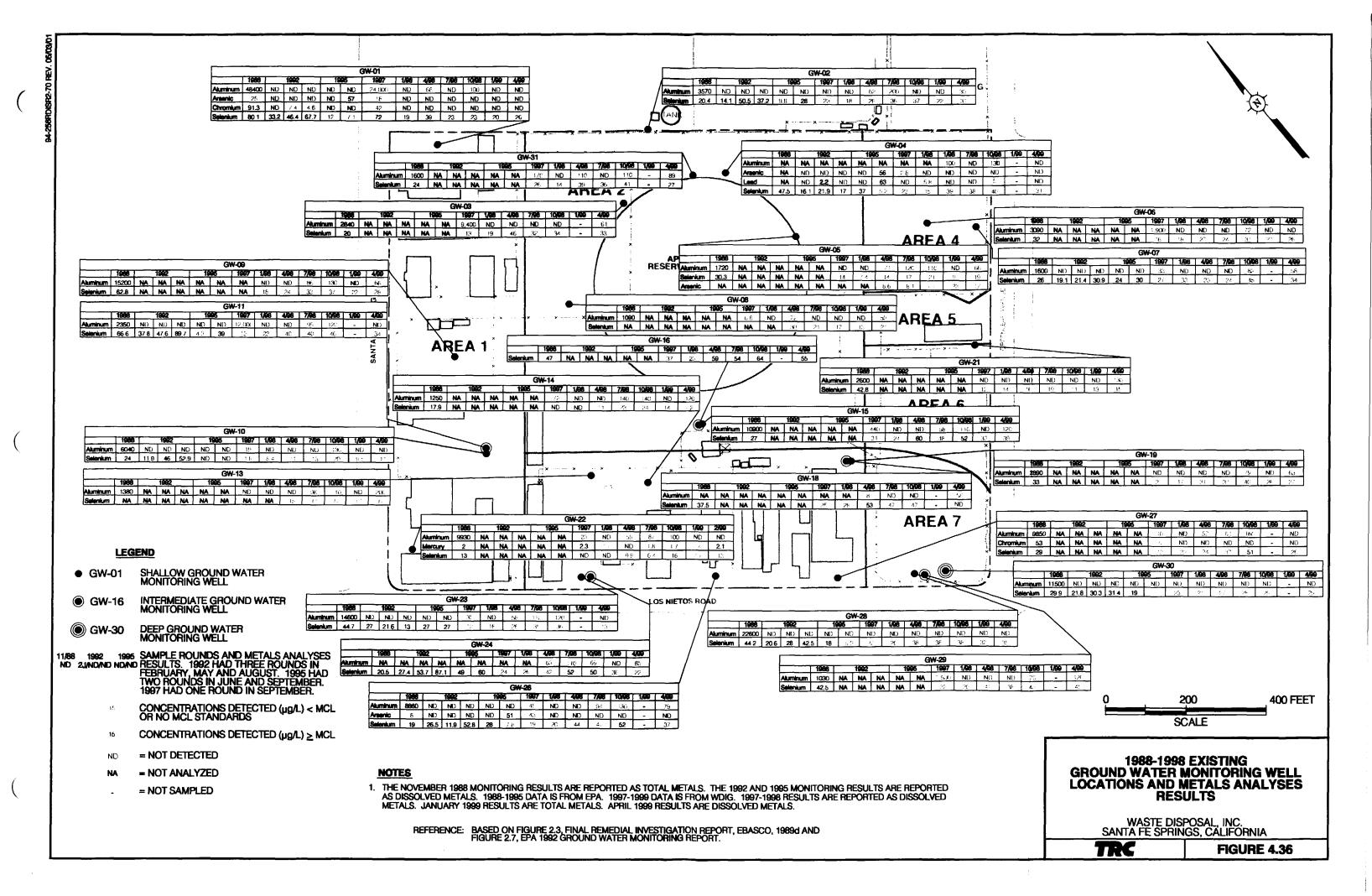


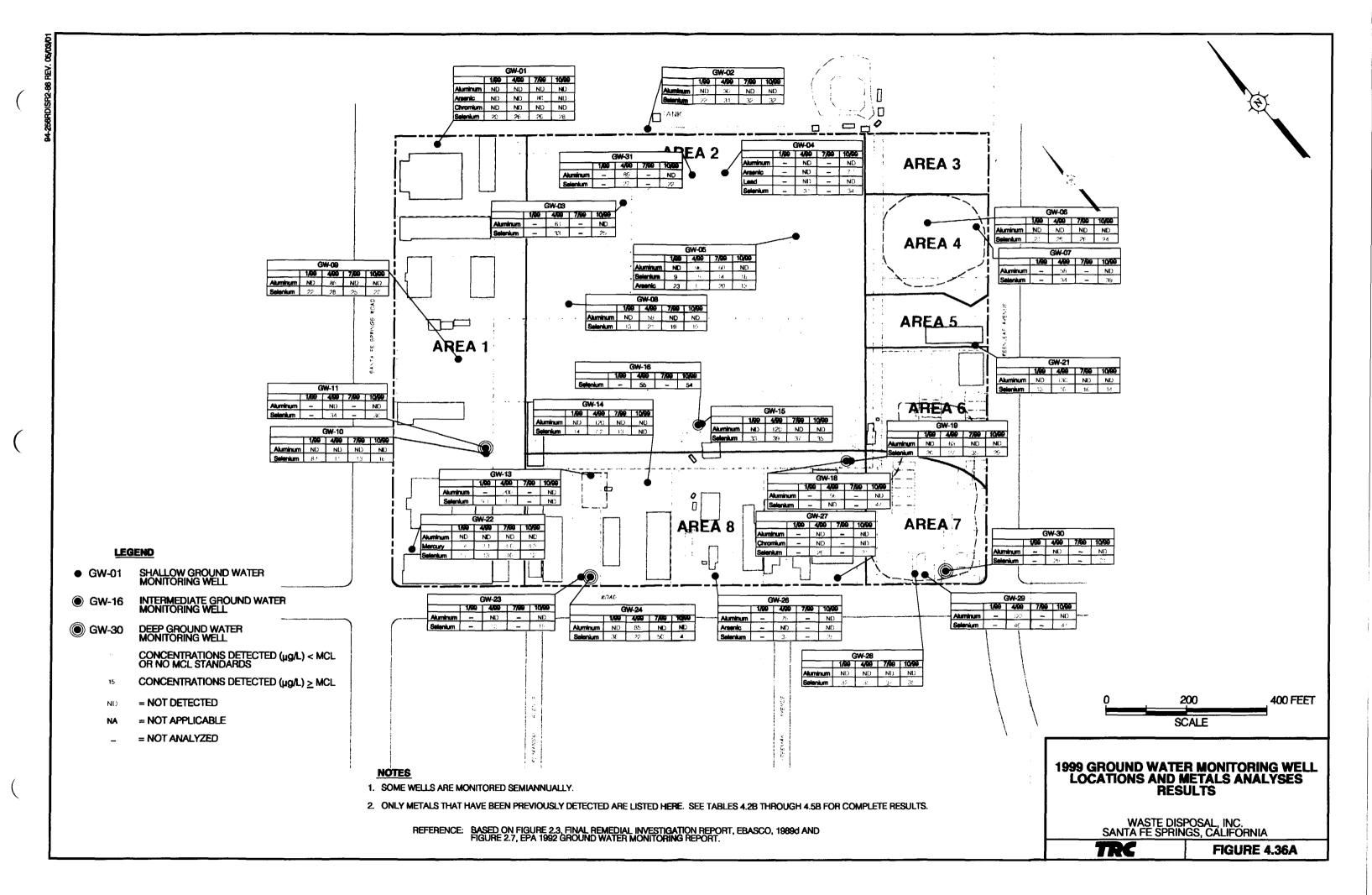


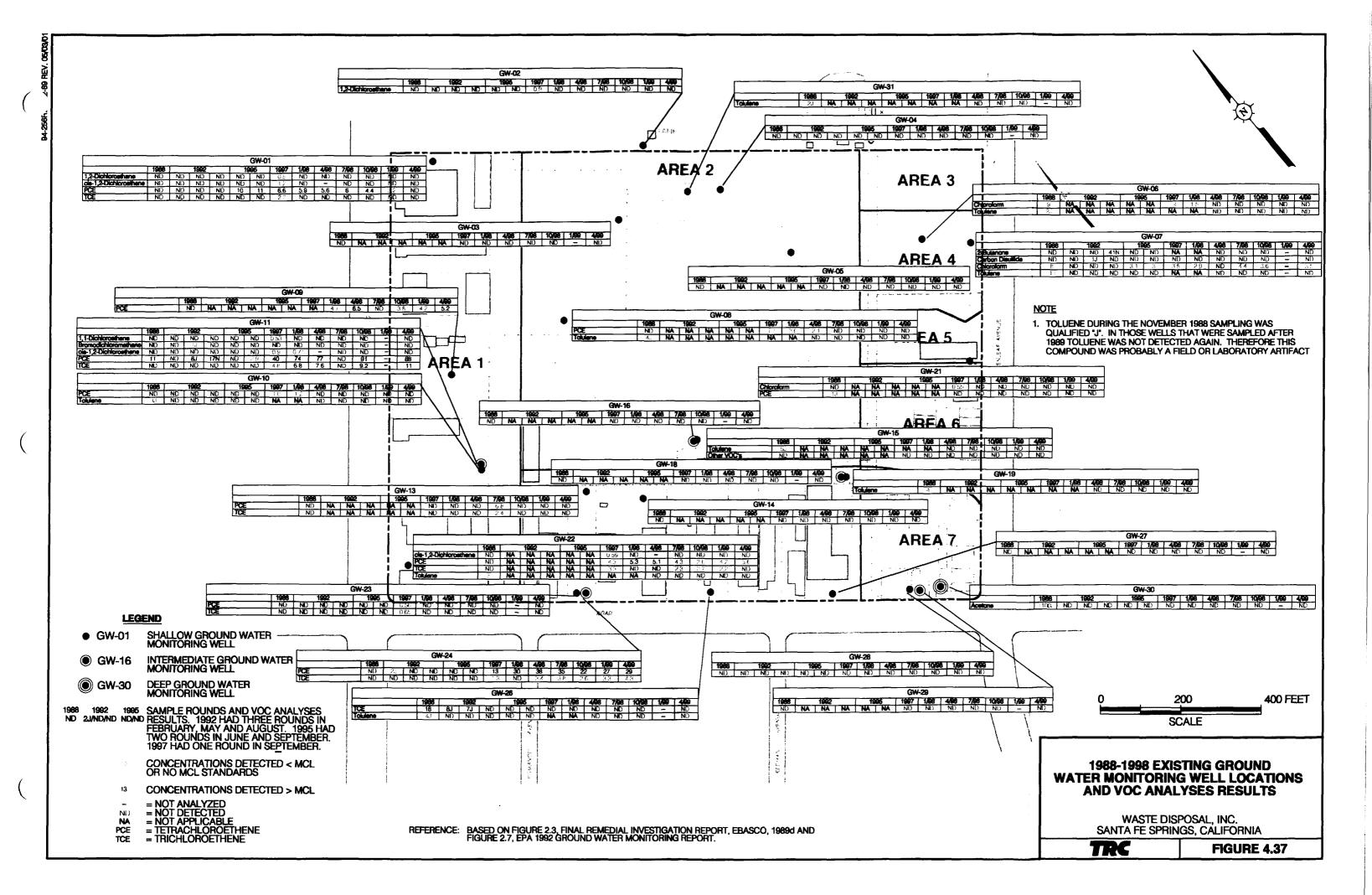


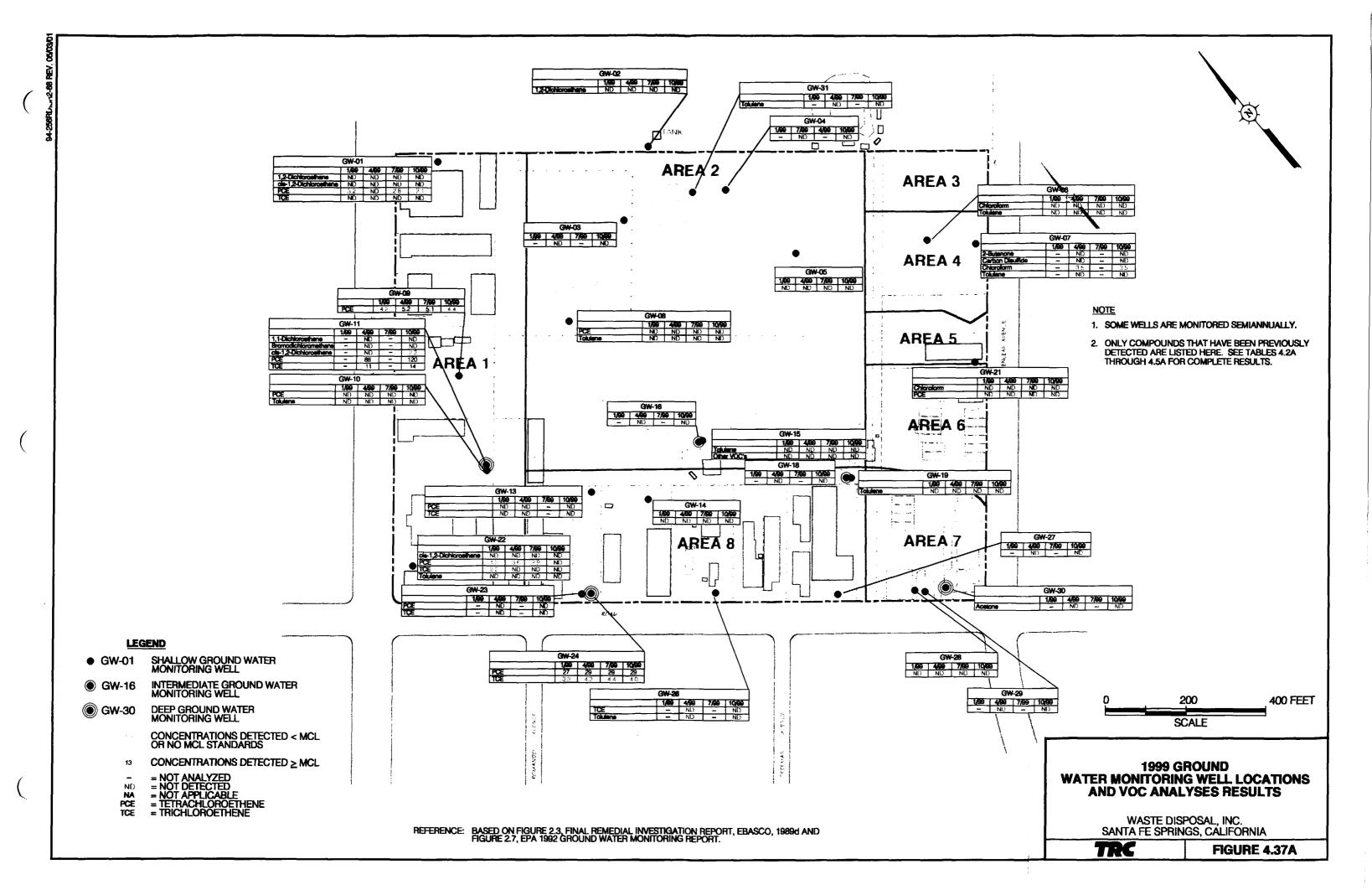


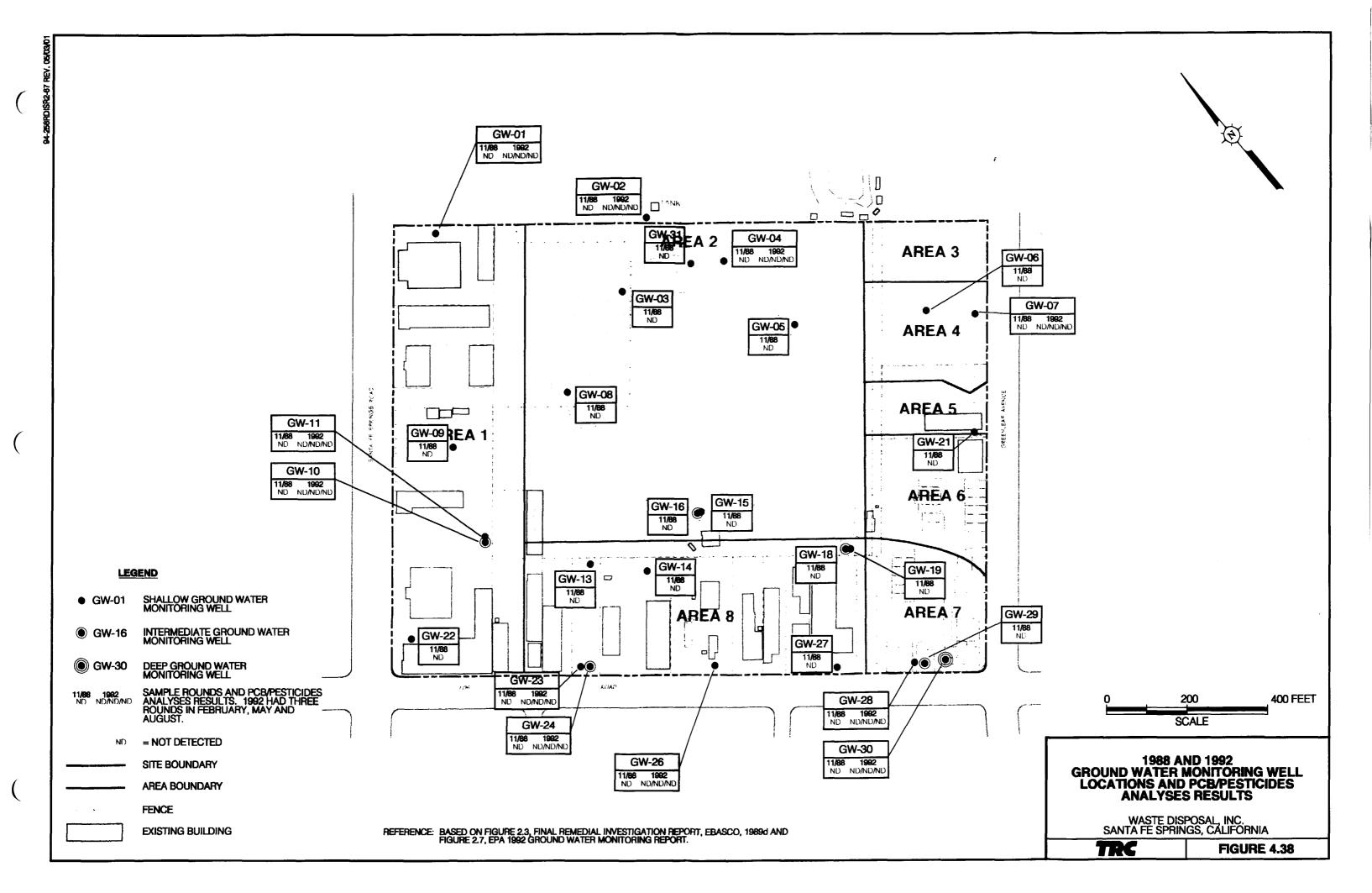


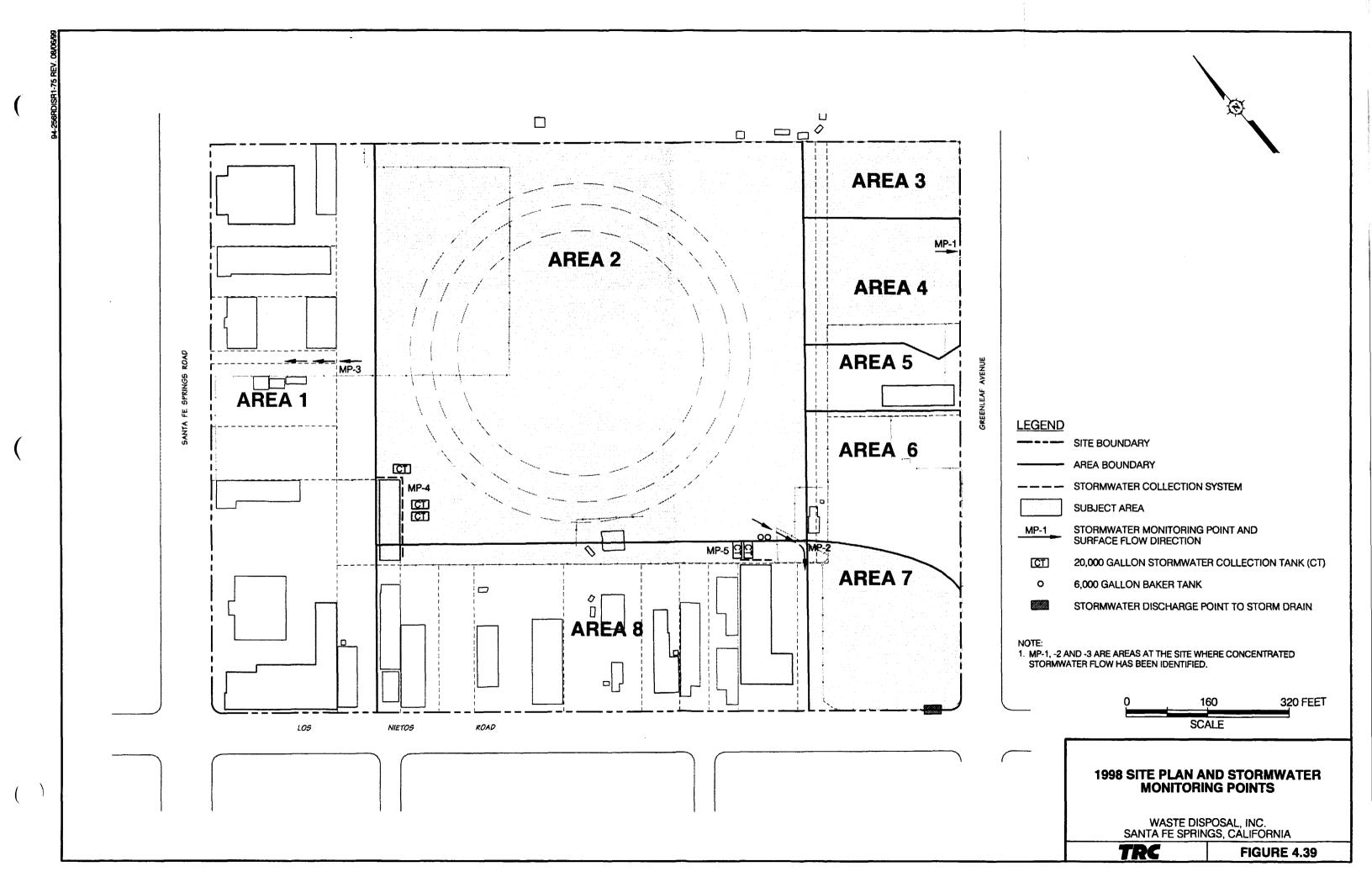


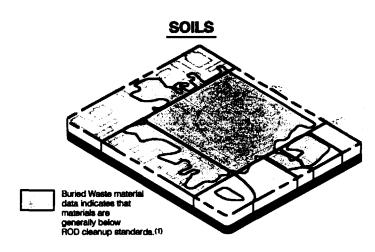




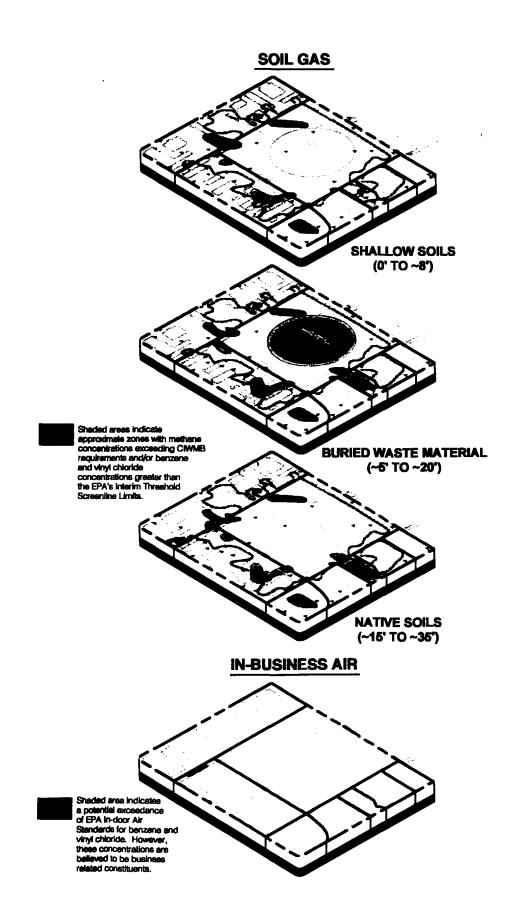








Potential Area of Reservoir Liquids Potential Area of Liquids Outside Reservoir



LEGEND

- VAPOR WELL
- GROUND WATER WELL

NOTES

(1) Soil sampling indicated approximately 24 exceedances of the ROD cleanup standards for only the total metals constituents (i.e.: As, Be, Cr, Pb and Tl), out of 648 analyses performed on buried waste samples.

SITE MEDIA CONDITIONS

WASTE DISPOSAL, INC. SANTE FE SPRINGS, CALIFORNIA

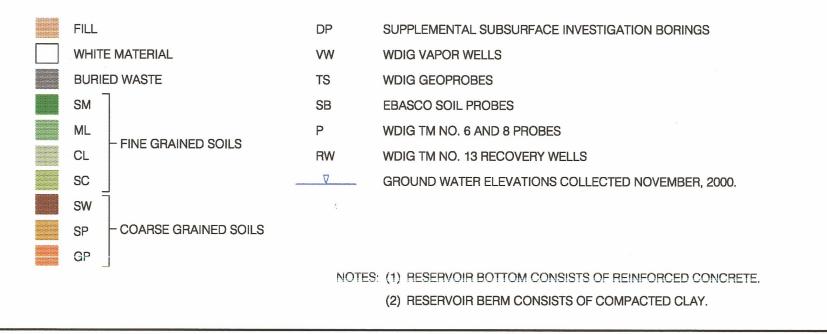
TRC

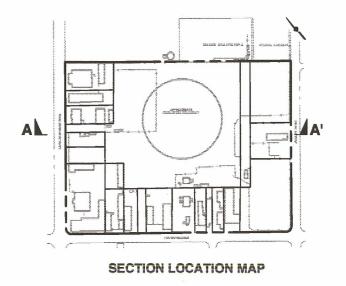
Area.6 LEGENC O BORING LOCATIONS

MARCHARITY IN TACEBRA TN 14 807 NG LCCATIONS W 1-CUT WASTE TM-14 HOPING LOCATIONS WITH WASTE REVISED LIMITS OF BURIED WASTE WASTE ITSPOSAL, INC. SANTA EE SPRINGS, CALIFORN A

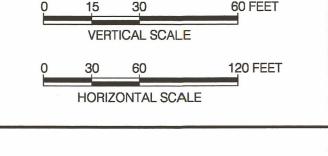
CTL FOTAD VAR FORMAN BORRESS





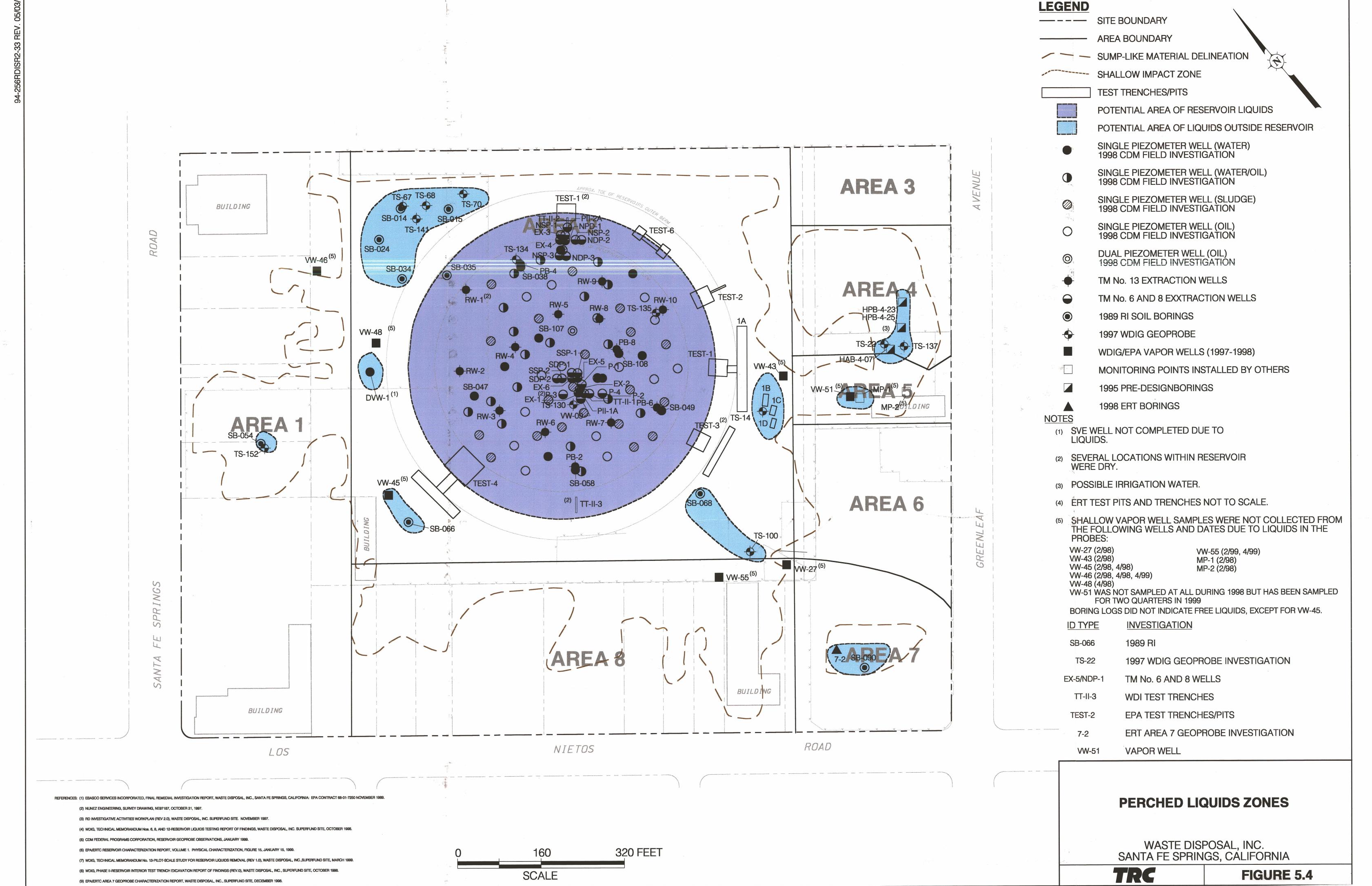


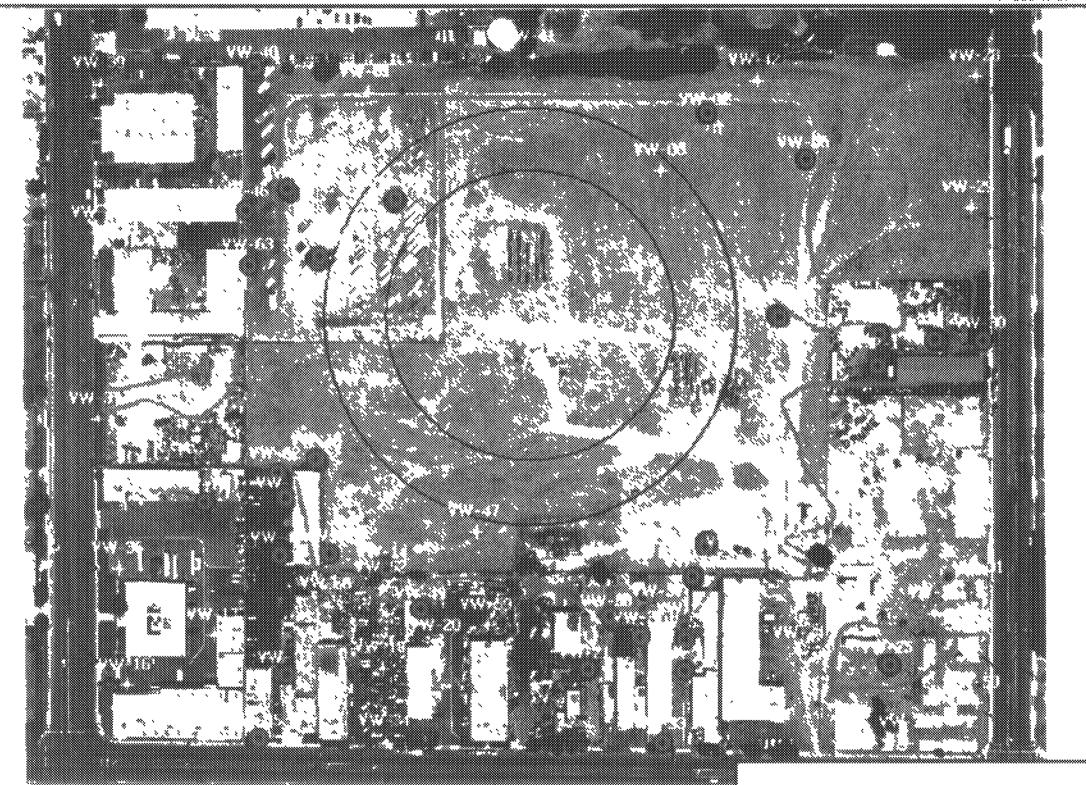
LOOKING NORTH



CROSS SECTION A-A'

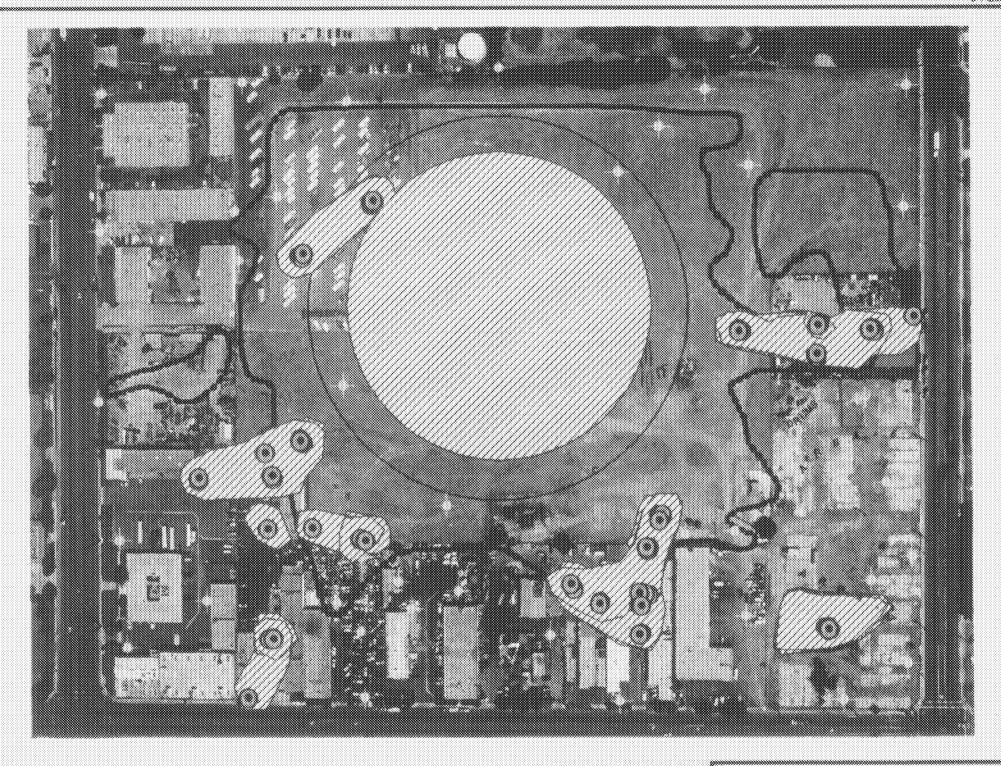
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA





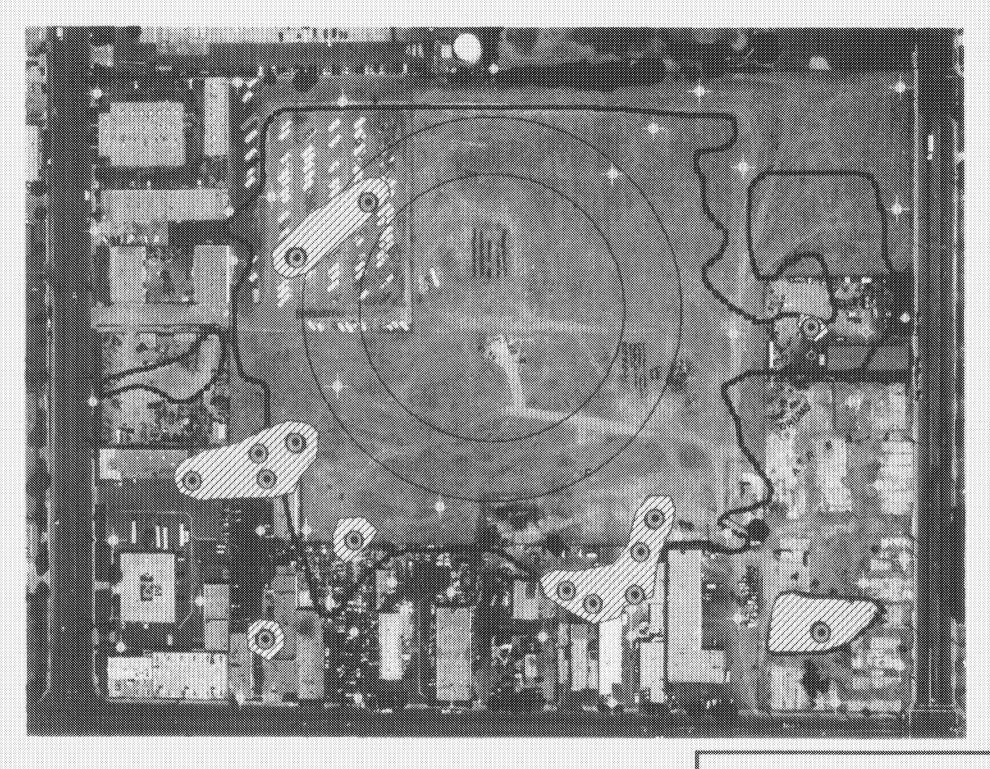
LOCATION OF VAPOR WELLS

WASTE DISPOSALING SANTA (T. SPRINGS, CALIFORNIA **FIGURE 5**



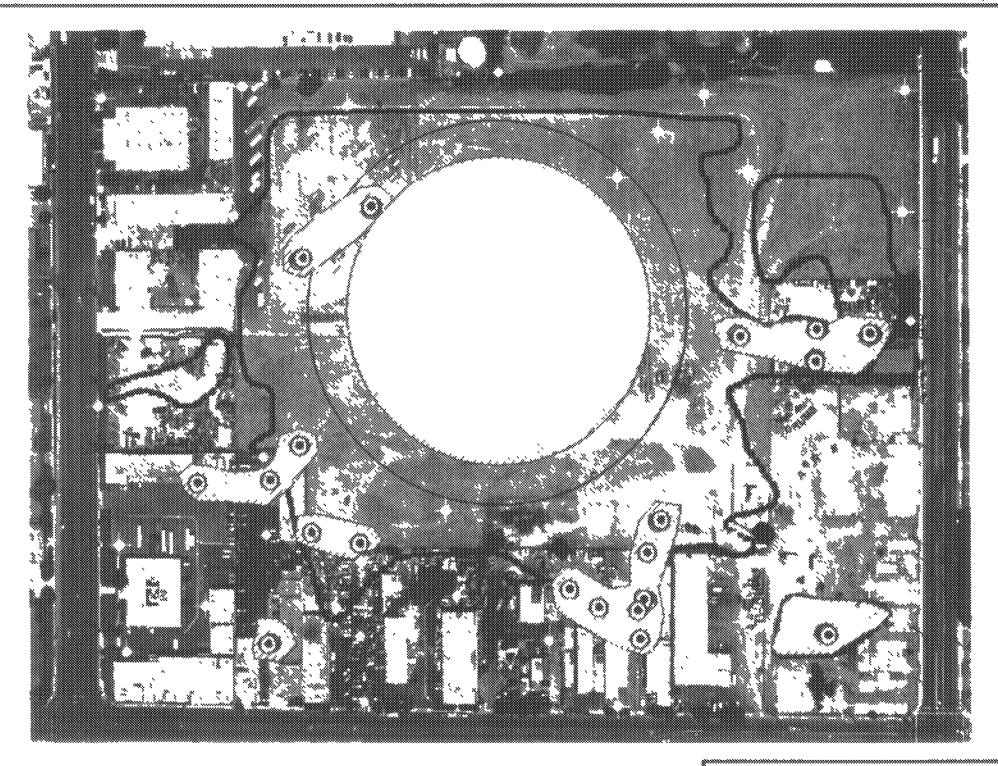
EXCEEDANCES OF METHANE (1.25%), BENZENE (100 ppb) AND VINYL CHLORIDE (25 ppb) CRITERIA FOR VAPOR WELL NETWORK

> WASTE DISPOSAL INC. SANTA FE SPRINGS, CALIFORNIA



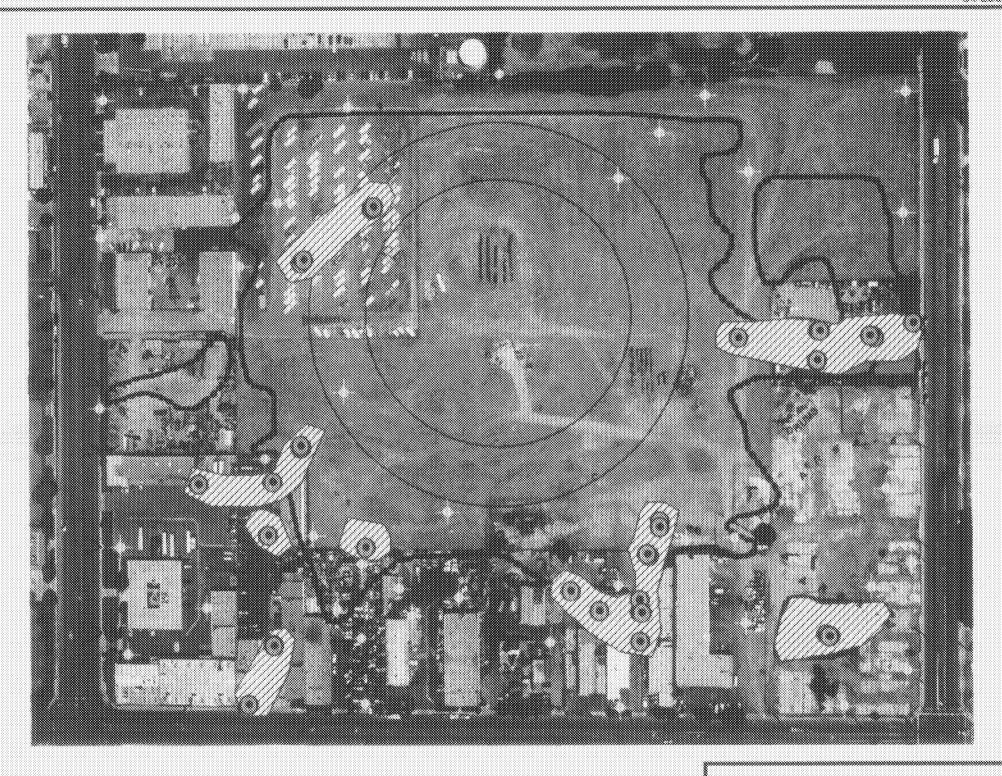
EXCEEDANCES OF METHANE (1.25%), BENZENE (100 ppb) AND VINYL CHLORIDE (25 ppb) CRITERIA -SHALLOW WELLS

> WASTE DISPOSAL INC. SANTA FE SPRINGS, CALIFORNIA



EXCEEDANCES OF METHANE (1.25%), BENZENE (100 ppb) AND VINYL CHLORIDE (25 ppb) CRITERIA -INTERMEDIATE VELLS

> WAS' DISPOSALING SANTA FE SPRINGS CALIFORNIA



EXCEEDANCES OF METHANE (1:25%), BENZENE (100 ppb) AND VINYL CHLORIDE (25 ppb) CRITERIA -DEEP WELLS

> WASTE DISPOSAL INC SANTA FE SPRINGS, CALIFORNIA